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ABSTRACT

Proceedings of the 1982 University of Arizona conference cover two- and four-year college conference sessions, as well as state and institutional perspectives. Topics include college planning in Mexico, consequences of budget reduction strategies, quality and financial structures, public and private competition, state-level formulas, student aid and the federal demise, fiscal stress and resources allocation, and excellence in higher education. Among the 30 papers and authors are the following: "Survival in the 1980s" (Clark Kerr); "Challenges of Excellence in Higher Education" (David Pierpont Gardner); "The National University of Mexico" (Jose Narro, Alfredo L. Fernandez); "Maintaining Quality Programs During Periods of Fiscal Stress" (Robert K. Thompson); "Institutional Management Flexibility: A Strategy for Dealing with Funding Reductions" (Edward A. Carter, Jack C. Blanton); "State Policy Options for Financing Higher Education" (Norman M. Fischer); "Trends in Higher Education Financing" (Paul Brinkman); "Enhancing Institutional and Program Quality" (Clifton F. Conrad); and "A Planning, Budgeting, and Evaluation System: Lessons from Experience" (Leif S. Hartmark). (SW)

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SURVIVAL IN THE 1980s:

QUALITY, MISSION, AND

FINANCING OPTIONS

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Edited by

Robert A. Wilson

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SURVIVAL IN THE 1980s:
QUALITY, MISSION, AND FINANCING OPTIONS

Edited by Robert A. Wilson

Center for the Study of Higher Education
College of Education
University of Arizona
Tucson, Arizona 85721

May, 1983

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FOREWORD

IDEA—A Mutual Opportunity Now

One of the more arresting facts to come forth from the 30 papers in this volume is that while higher education in the U.S. is wrestling with the problems of retrenchment, higher education in Mexico is being pinned to the mat by an insatiable demand for its services.

The roots of these respective problems will be found on pages 2 and 64 of these Proceedings. Kerr quotes a report of the Carnegie Council on Higher Education, which projects a 25 percent decline of the U.S. college-going age cohort (18-24) by 1997. Velasquez states that 40 years ago Mexico had a population of 20 million with only 20,000 students in higher education. Today that nation has 68 million people and 840,000 students. At its current rate of growth, Mexico's population in the year 2000 will exceed 130 million, and seekers of higher education will increase even more!

Does this suggest an obvious, although complex, matter for inquiry? Could U.S. higher education somehow aid Mexico in solving its burdensome problems in this area by making available as much as possible its surplus facilities and personnel, its advanced research methods and technology, and its expertise in educational processes? To be specific, could we enroll substantial numbers of Mexican students in our colleges and universities; send personnel and methods to Mexican institutions; sell, rent, or loan unneeded equipment for use south of the border; begin a pertinent dialogue between U.S. and Mexican educators?

Of course, there are insurmountable problems which always must be surmounted in the pursuit of any worthwhile endeavor. We can think of a few. First is the language barrier. But there are thousands of Mexican students with adequate fluency in English. And on our campuses their presence might just enhance our interest and facility in Spanish — a rather intriguing idea, with the presently developing patterns in Latin America. Then there is the ever-present shortage of financial resources. Perhaps the Mexican government might see an opportunity to save billions of pesos by using our established

resources rather than having rapidly to create new ones of their own. Washington might discover that schooling for leadership in civic, political and cultural affairs is at least as promising to national security as present Latin American strategies, in which event major sums for the advancement of education would be included in our aid programs. And there is the matter of vested interests. In the case of U.S. higher education, such a program might help stabilize and preserve present resources, not to mention broadening experiences and enhancing achievements. Progressive thinking Mexican educators might perceive the promise of a quantum leap forward. Political complications? Yes, but what international relations are devoid of such preplexities.

Accordingly, we propose the launching of an Inter-American Design for Educational Advancement (IDEA). And please note that we do not suggest the *organization* of such a scheme. Please note also that the *D* in the acronym does not stand for *Department.* IDEA is a concept, not a bureau, not an authority, not a commission, not even a consortium. It is not to be caught up in, delayed, or strangled by rules, regulations, and committee recommendations. Oh yes, it may require interchanges between those interested in such a concept for sharing experiences and for concerted action on broad fronts, such as securing Federal financial support (although this universally regarded indispensable prerequisite may not be that important). IDEA should be a concept embraced by individuals, by academic groups, by institutions on their own and to the degree that they wish, and pursued in the full spirit of American enterprise, brotherhood and philanthropy. Some will be more interested than others, some will be better situated or equipped than others, and some will be more driven than others. So be it.

A good idea is one that attains its specific objectives. A superior idea achieves even more. We believe IDEA can be a superior idea, for its potential is far greater than serving the mutual interests of U.S. and Mexican higher education. It could also contribute to the transcendent interests of the two nations.

Historically, the founders of democratic societies have been their enlightened leaders. Once believing in the virtues of freedom and individual dignity, the common man has often embraced them, indeed died in their cause. American democracy may have been won by the dauntless hearts of the men at Lexington, Valley Forge and Yorktown, but its genesis was in the inspired minds of the Adamses, Jeffersons, Franklins, Henrys and Washingtons.

It is not likely that democracy will emerge in Latin America without such leadership. It cannot be imposed by military force or legislative fiat. It will not be purchased through land reform or welfare programs. It will not take root or flourish in a climate of illiteracy or semi-literacy.

Both the U.S. and Mexico have a vital concern for the development of stable and just societies in Latin America. The concept of IDEA has the potential of service to all of Latin America and, hence, to the advancement of North, Central, and South America alike. Therein lies the promise of IDEA as a superior concept.

Retrenchment is seldom found in the American lexicon. Why should U.S. higher education break with that tradition?

Robert A. Wilson
and
Larry L. Leslie

PART I

SURVIVAL IN THE 1980s: QUALITY, MISSION, AND FINANCING OPTIONS

CHAPTER 1

Survival in the 1980s

Clark Kerr

Survival has many dimensions. In keeping with the main topics of the conference, I shall address three of them: first, the quantitative challenges to survival; second, the survival of quality in the face of these quantitative challenges; and third, the long-run goals that make the survival in strong condition of our institutions of higher education a great national imperative.

It is somewhat ironic that we address these topics in this state of Arizona; for Arizona is one of the few states which, in the 1980s, faces the prospect not of a battle for survival for its institutions of higher education but the challenge of further growth — both quantitatively and qualitatively. This location for a discussion of national problems does help to make the point, however, that the national problems of higher education in the United States are almost infinitely divisible into immensely varied local problems — by region, by type of institution, and by fields within institutions. There are almost no universally applicable generalizations that can be made and absolutely no universally applicable solutions that can be advanced. Each situation has its own unique aspects. All that I shall say is qualified by this admonition.

Dr. Clark Kerr is President Emeritus, University of California, Berkeley.

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Quantitative Challenges — the Demographic Depression. Here I have little to add to the last report issued by the Carnegie Council on Higher Education — *Three Thousand Futures* (1980). That report noted a prospective decline in the size of the college going age cohort (18-24) of nearly 25 percent by 1997. It said attendance at colleges would likely go down less than this percentage for a variety of reasons and suggested an overall range of decline of 5 to 15 percent. It emphasized that this overall decline would be an aggregation of increases in enrollments in some institutions and of declines in others — that there were 3000 different futures in prospect.

I now have, in retrospect, two qualifications about this report. One is that I think it would have been better to suggest an overall range of decline of 10 to 15 percent; the 5 percent possibility was unrealistically on the optimistic side. I have recently read Dave Breneman's analysis (1982, p. 7) of essentially the same data that we used, and he suggests a 15 percent figure. I do not think anyone can be that precise. But the arguments he advances for the 15 percent figure have led me to rethink our line of argument and to believe that we should have raised the bottom of our suggested range to 10 percent. We may have been too concerned about offsetting the predictions of doom in some attention getting, end-of-the-world estimates of declines reaching 40 and even 50 percent.

The second qualification is that the diversity of future prospects among institutions is, if anything, likely to be even greater than we suggested. I have recently been visiting a whole series of institutions in widely distributed parts of the country in connection with a study of presidential leadership that David Riesman and I are doing under the sponsorship of the Association of Governing Boards. I have been to an evangelical college (a Liberal Arts II institution — a category we said was very vulnerable) located in a very depressed section of the nation, but it is under great pressure to expand enrollments. I have visited a leading research university (in a category which we thought was largely invulnerable) that has already cut enrollments substantially and has suffered a 15 percent decline in real income. These are two of many possible examples. Anyone who talks about **the** future of American higher education should make similar visits to reality. There are invulnerable institutions in vulnerable categories and vulnerable institutions in invulnerable categories.

Leo Tolstoi introduces *Anna Karenina* by saying that "all happy families are alike; each unhappy family is unhappy in its own way." When higher education was growing in recent times, we were all happy

in much the same ways. There will still be some happy campuses in the times immediately ahead. But most campuses will be unhappy and each in its own way and to its own degree. The fate of Anna, dying under the wheels of a train, even awaits a few.

Quantitative Challenges — Financial Resources. Here I am, again and by comparison with other observers, a somewhat hesitant optimist. Federal financial support of higher education has appreciably leveled off but, particularly as a consequence of the higher education acts of 1972 and 1978, at levels totally unprecedented in American history. The new tax laws greatly benefit higher income groups that send such a high proportion of their children to college and give such a substantial proportion of private gifts as alumni and as non-alumni donors. I am also impressed with the record of the fifty states in the support of higher education and have full confidence in the desire of most states to do their very best for higher education. The recent history of state support of higher education is remarkable. Ruyle and Glenny (1978) have shown that the states as a whole maintained their support of higher education from 1968 to 1977 at an almost absolutely even pace in terms of real expenditures per student. Looking at the data alone, one would never suspect that there had been the greatest series of student revolts in our national history, that there had been a series of recessions, and that OPEC nations had raised their prices several times over, drawing heavily on our national income. I am sure that most states, within their several greatly varying abilities, will seek to maintain their commendable records.

It was very wise that the basic responsibility for the support of higher education was left in the hands of the states. You will remember that in the late 1960s and early 1970s organized higher education wanted the federal government to give lump-sum grants to institutions as such. Our Carnegie group stood almost alone in opposing this approach. We feared the loss of state support as a consequence and the development of a federal system. The federal government, inherently, cannot economically and will not politically give the same steady support year in and year out to institutions of higher education as do the states.

My concern, thus, is not that the states will desert higher education. It is, first, that many states are in difficult financial straits and, second, that new formulas are necessary and may not be forthcoming. Past formulas have been almost totally enrollment driven. This works well for higher education in a period of enrollment growth. In fact, institutions gain qualitatively with formulas that

assure steady real resources per student because marginal costs decline modestly as more students help to support the basic overhead. Costs per student at the same level of quality rise, however, when enrollments decline; and they may rise quite substantially in times ahead. The overhead added during growth continues, but there are fewer students to count against it. Ideally, the states should create new formulas. These formulas would distinguish between overhead costs that go on, at least in the short and medium-run, without reference to enrollment levels and variable costs that change quickly with enrollment levels. The Carnegie Council suggested that overhead costs amounted to about 40 percent for research universities and 20 percent for community colleges. A recent study in California (*State Level Formulas in Times of Declining Enrollment*, 1980) shows a figure of 45 percent for the University of California and of 35 percent for the state universities and colleges but sets no single figure for the community colleges since their figures vary so greatly by size of the college and by nature of the particular program. I recently visited two community colleges (in Phoenix, Arizona and Bellingham, Washington, which are colleges without walls. They rent space and hire part-time instructors. Their fixed costs are very low indeed.

Consequently, I think the states should (and some are) adopt new formulas based upon careful studies of the distribution of costs as between fixed and variable by type of institution. I have three specific comments to make, however, if and when this is done: (1) where the states protect overhead costs in their formulas, they should have the right to insist that buildings and grounds be maintained and that the libraries be exempted from cuts in the purchases of new books. Too many campuses cut in these areas and build up great deficits which they will later demand that the states correct; (2) overhead costs should not be protected from cuts on their merits but only from cuts because of enrollment declines; and (3) overhead costs in the short- and medium-run become variable costs in the long-run, and some allowance should be made for this.

What states should do and what they will do are two different matters. Some states cannot afford new formulas such as those just suggested. Officials in other states think it is only fair that formulas that were advantageous to higher education in a period of growth should be maintained in a period of decline even though they then become disadvantageous — it all balances out; and higher education, it is quickly noted, did not complain when it made a profit on these past formulas. Consequently, I doubt that many states will adjust their formulas adequately, in the directions suggested, or even at all;

and this will be a source of potential deterioration in the quality of higher education.

Another concern is that the states make adequate provision for the support of private institutions. The institutions most threatened with survival are some of the less selective liberal arts colleges. We could reach the year 2000 with a substantial reduction in their numbers. Yet they represent the greatest source of diversity in American higher education. The best form of support is tuition scholarships based upon student need.

Thus I have two concerns about the states: that many of them will not create the desirable new formulas and that some of them may not give sufficient aid to their private colleges.

My apprehensions about institutional financial behavior are much more intense. As I visit institutions around the nation, I find too many of them in the following categories:

1. Not making any plans at all. They follow a "wait and see" approach. The current president often does not expect to be around when "wait and see" is no longer a feasible policy.

2. Making cuts which are politically easy in the short-run but very costly in the long run — as in maintenance and in library support.

The vast majority of institutions are still found in one of these two categories.

Somewhat further along are the institutions considering whether institutional cuts, when and as they come, should be selective or across-the-board.* A recent national report starts out by saying that the "greatest danger to quality in higher education in the 1980s is 'cuts-across-the-board'" (National Commission on Higher Education Issues, 1982, p. 1). I doubt this. Selective cuts only in maintenance and in library purchases can be just as great a threat if they should become excessive. The basic argument for selective cuts is that this is the best way to maintain academic excellence; weak areas can be eliminated and strong areas kept. The basic arguments for across-the-board cuts are that they best preserve the morale and the cohesion of

*See, for example, the discussion in Howard Bowen, "Sharing the Effect: The Art of Retrenchment" and Frank Newman, "Selecting the Effects: The Priorities of Retrenchment." *AAHE Bulletin*, Vol. 35, No. 1, September 1982, pp. 10-13.

the academic community since everybody shares the sacrifices; they ease the tasks of leadership which are onerous enough in any event; they preserve the totality of the campus, all parts of which will be needed again in future years; and selective cuts are by their nature arbitrary and thus the source of contention. We are asked to choose between academic excellence on one side or the internal political welfare of the academic community on the other.

I do not think the choices are this clear cut. To begin with, there are more choices than just these two:

1. Selective plus adjustments. Not just keep the strong areas but add to their strength by very heavy cuts in weaker areas — more than just necessary to balance the budget.
2. Selective cuts. Cut the weak and preserve the strong.
3. Direct totally across-the-board cuts. Every area gets cut the same percentage.
4. Direct across-the-board cuts by category — for example, all part-time faculty or all non-tenured faculty or all replacement opportunities are eliminated.
5. Direct across-the-board protection by category (the reverse of 4), for example, guaranteed protection of all tenured faculty members, or of the prospects of all persons already on the academic ladder whether with tenure or not, or of all departmental faculty positions as they now eixst. This, of course, concentrates the cuts elsewhere.
6. Indirect across-the-board cuts by allowing inflation to make the cuts in real terms little by little and as the result of the actions of many people.
7. Impersonal across-the-board cuts by following changing student demand in abandoning some fields and in expanding others as the result of an internal formula.
8. Cuts by external agents — the governor, the legislature, the coordinating council, the system-wide administration.
9. Mixtures.

The choices to be made involve not only what is done and by whom it is done but also when it is done. Timing is of great importance. What is the best at one moment of time may be the worst at another.

I would like to suggest one illustrative mixture as a way of arguing for mixtures carefully sequenced:

An early cut totally across-the-board to alert all members of the community that the financial situation is serious and that everyone will be asked to sacrifice something — the latter also reduces the sense of guilt when selective cuts must later be faced and thus makes them more likely to be undertaken. Also, there are some expendable items in nearly every program.

A subsequent cut across-the-board in the most expendable categories.

A later series of cuts on a selective basis.

Finally, if the situation gets very serious, the introduction of a selective plus policy in order to save or improve the quality of the institution for the long run future.

The composition and the sequencing of mixtures are almost infinite in their combinations. These mixtures should seek to advance academic excellence **and** preserve institutional cohesion — the first cannot be done without some attention to the second. The test of leadership is not courage in making selective cuts or political acumen in making across-the-board cuts but wisdom in creating the best mixture well timed.

In any event, it is important that the welfare of all elements of the community be considered — not just the faculty; that the board of trustees share responsibility for the cuts and not just stand by ready to repudiate the administrators when the repercussions come; that impersonal forces — such as inflation and student choice be given a chance to work their political magic; that cuts be made as and when necessary and not as part of a "plan" announced long in advance — such plans can be terribly divisive and destructive of morale. It is, on the contrary, very wise and very helpful to plan growth well in advance; and it is very wise to plan growth totally on a selective basis. Managing decline involves more than just continuing the planning processes and the policies of growth. This is a fundamental rule.

My overall view is that the quantitative challenges from both demographic and financial sources are moderate in nature and can be handled by most institutions without any real threat to their survival in the 1980s. And I have less fear about what the states may do of a negative nature to higher education than of what some institutions of higher education may do to themselves. Some states will make the

situation more difficult, but some institutions will make it impossible.

The Qualitative Challenges. My basic concern for most institutions of higher education is not quantitative survival; it is with qualitative erosion. The goal should be that higher education in the year 2000 be at the same level of quality in the performance of its many functions as that which prevails in 1982 before the demographic depression sets in. Actually the goal should be higher than this since society all the time needs better technical and social skills and better research — all supplied in substantial part by our colleges and universities. Maintenance of quality is a minimal goal.

I have noted above some threats to quality: the burden or rising overhead costs per student, the loss of some of our most diverse institutions, and the assignment of cuts by some institutions to minimize short-term political costs but maximize long-term academic costs. But there are others as well:

> We stand the possibility of losing a whole generation of young scientists in a number of fields. With fewer students, there are fewer opportunities for new positions or even for replacements in old positions. Yet young scientists are the most productive, and they are more productive in a university environment than in industry or government. This is a loss to our institutions and a loss to our nation.
>
> An aging faculty makes it harder to introduce new fields, new specialties within fields, new courses within specialties, and new content to old courses. Also, faculty members in their experiences and their interests are often further removed from their students.
>
> Destructive competition has already begun among faculty members, among departments, among schools and colleges on a campus, and among institutions. It takes the form of easier grades, easier assignments, easier requirements, easier degrees — all in order to attract students.
>
> Political confrontations have increased and will increase on campuses, and they drain the psychological energies of faculty members. These confrontations develop over where the cuts will be concentrated — on the humanities, on the social sciences, on the sciences, on the professional schools. Alliances are made, plots are laid, and internal antagonisms are aggravated.

Good leadership is harder to obtain, and it is more difficult to make it effective once secured. In the study of leadership to which I referred above, I have been finding many people who do not want to manage decline and even more who have taken positions of leadership but who are so tied down by attention to current controversies that they cannot give proper attention to longer range problems. And hard decisions and short terms seem to go together — more enemies are made; more goodwill is used up faster. This is a lesson easily learned.

Faculty morale suffers from reductions in real income and from slower promotions.

Consequently, it is going to take some heroic efforts to maintain the quality of higher education in the period until 2000. I wish that academic leaders on campuses had given and were giving as much attention to the qualitative challenges ahead as the financial leaders have already given and are now giving to the quantitative challenges. Those of you at this conference fall mostly in the latter group. Yet your thoughts and efforts can be fully effective only if the former group follows your example of intense concern and deep thought. Qualitative survival is a greater challenge than quantitative survival in the 1980s and 1990s.

The Challenge of New Missions. Higher education must maintain its old missions of teaching, research, and public service as historically conducted. But there are some new missions ahead. The best discussion of them is by Howard Bowen in *The State of the Nation and the Agenda for Higher Education* (1982). He argues, and I agree, that, even in this time of troubles, institutions of higher education should be looking forward to their longer run futures, that current survival is not enough. He suggests three new missions in particular:

Participation in the creation of a nation of educated people, defined as one in which a majority of the people have had formal education beyond the high school. This is potentially within our grasp.

Greater service to all of our youth, particularly by the community colleges.

Greater contributions to the understanding of moral conduct and to its implementation on campus and off.

I would add to this list at least the following:*

> More attention to improving the quality of debate on issues of public concern.
>
> More facilities and programs to enhance the cultural life of surrounding communities.
>
> Leadership in developing high quality programs for use through the new electronic technology.

We face about fifteen difficult years ahead. Beyond that, enrollments will expand again, new faculty members will need to be hired in large numbers if only to replace those then retiring, and new buildings will need to be built and old ones remodelled. There will be a period of rejuvenation. Also ahead are the new missions to be performed. It is an assured fact of industrial society that higher education becomes an ever more important sector within the total society. The challenge of the 1980s and the 1990s for higher education is not only to survive but to be ready to participate effectively in the many opportunites that lie beyond this time horizon. We can count as a basic law that higher education becomes progressively more central to the welfare of society.

*See also my review of Howard R. Bowen (1982), *The State of the Nation and the Agenda for Higher Education*, in *Higher Education*, vol. 11, 1982, pp. 593-600.

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PART II

CONFERENCE THEME FROM THREE PERSPECTIVES: STATE, INSTITUTIONAL, AND EMERITUS

CHAPTER 2

Survival in the 1980s: A State Perspective

Edward O. Moulton

Perhaps your hope was that I would come before you today and suggest a host of unique and neat ways we have tried successfully in Ohio to effect substantial economies in our colleges and universities without doing any violence to existing programs and services. In other words, some quick fixes, please! In fact, truth in advertising demands that I tell you I have no new "finds" to add to the ones already identified in the literature and with which I am sure you are all familiar. However, allow me to categorize some of those approaches with which we all have grappled.

The Household Approach

My first category I call the household approach because of my many years of familiarity with it on the home front. This is the process that many of us follow each month at home — put the bills in a neat pile as they come in and pay from the bottom as the funds become available. This is just another way of saying deferred maintenance.

Dr. Edward O. Moulton is Chancellor, Ohio Board of Regents.

Hope springs eternal. There is belief (or better, hope) that the economy, the demographic projections, and all other unfavorable factors will turn around suddenly, and the next year will be business as usual. This being the case, it would seem totally logical and defensible simply to hold up payment for these normal needs until then. This mentality takes many forms: using reserve balances, letting the "tuck pointing" and roof maintenance go for another year, implementing increases in annual rate expenditures mid-year, and so on. But this approach has its problems. First, this nation's economy will not likely turn around precipitately. Nor will there be a sudden upward shift in enrollment patterns to fully offset the declining number of high-school graduates by a higher percentage of such students going on to college, by other age group educational needs, or by refresher/retraining programs. Thus, because of these many uncertainties, prudence would certainly suggest we cannot afford to borrow into the future any more than many of us have already. Indeed, by doing so, we may very well compound the burden of our future financial circumstance. There is no real alternative other than to start dealing with these various problems now.

"Egalitarianism"

Another approach which we all have employed is across-the-board cuts. This approach has the virtue of being far more acceptable and easier to implement than selective cuts. Yet we all know across-the-board cuts are seldom an effective response to the problem at hand. With rare exception, such actions punish administrative and academic initiative and, in turn, excellence, while rewarding the sleepy and the incompetent. But this approach is "politically" popular to the egalitarian mentality. Done on a protracted basis such cuts will devastate the mission and goals of institutions of higher education.

One alternative to this approach, all too often enthusiastically endorsed by faculty budget committees, is to take deeper cuts in the academic support areas than in academic programs. The end result is that limitations are imposed on critical support activities such as fund raising, bookstores, hospitals and clinics, admissions offices, laboratory supplies, and others that generate their own income and profit and provide essential services to the academic programs. This mentality believes all financial problems of our universities and colleges can be readily solved by shooting the dump trucks and digging up the petunias. Other than the disruption of essential services, the biggest problem with this approach is that money spent in nonacademic areas at most institutions is relatively small by

comparison with academic program expenditures. For example, Ohio's state universities expend only about 20 percent of their state resources on institutional support and auxiliary services.

The 2x4 and Mule Approach

A third general area that has been used in the past, and which is alive and well today, is what I call the "get their attention" approach. This mentality involves imposing cuts in areas that most adversely affect the public interest. For the external constituencies, some colleges and universities have chosen to cut back disproportionately or threaten to eliminate various public service areas such as radio and television programming, speech and hearing clinics, childrens' art programs, public lectures, library access, athletic facility availability, and any number of other activities that will alienate as many people as possible among the universities' strongest supporters and friends. And then, if there are still some friends left within the intellectual community, you can always close down your FM classical music station, if you have one.

Internally, of course, you can make a similar point. There was a classic case at one of our institutions many years ago when in a budget crisis the leadership threatened to eliminate the toilet paper in the lavatories. But oftentimes you do not have to go quite that far; paper toweling has done the trick almost as well. The most frequent form of petulance is exhibited by eliminating all library book and periodical purchases. This certainly will get the attention of the faculty, since it does great violence to a fundamental learning resource of the institution. Sometimes it has the opposite effect. We all have heard the legendary legislative response, "Good, they haven't read all those they already have!" And then there is always the elimination of equipment purchases. If done in the last half of the fiscal year, assuming the institution is only modestly effective with its acquisition program, there is little financial meaning anyway because the monies would have long since been committed. And there is always the old standby — freeze out-of-state travel. Unfortunately, once this happens, you spend the rest of the year making necessary exceptions until finally a trip disallowed is the exception rather than the rule. In the process you discover how many people require travel as a condition of their research grants, and you find you have eliminated your athletic competition since your athletes cannot leave town. Immediately there is a redefinition involving "essential" travel, and any cost savings are negligible.

There are many other areas in which to exhibit masochism, such as raising student fees substantially, particularly midyear, and immediately depleting your student-aid funds, but generally these are counterproductive except for posturing and symbolism.

Program Review

So, after you have implemented all possible meaningful selective cuts in the various support areas and achieved maximum efficiency, what choices are left? Over 80 percent of the budgets at most institutions is dedicated to academic programming. And over 80 percent of these expenditures is for personnel. Thus, in the long term, there is no effective way of avoiding the careful in-depth review and contraction of existing academic programming commitments in a major budget crunch. Many will argue that this should be done only as a last resort — only after just about everything else has been eliminated. That's foolishness! Obviously the support components are to service the academic programs. To eliminate the support services in an unbalanced way can only reflect unfavorably on the quality and quantity of academic programming.

Clearly, what must be done to effect meaningful cuts is to undertake a comprehensive and careful examination of all existing academic programming at an institution. While enrollment levels and productivity cannot be the sole controlling factors, they must be important ingredients in these considerations, along with overall mission of the institution, service function of the program liberal arts balance within the institution, future growth potential, projected manpower needs (where applicable), and faculty options, as well as the proximity of other similar competing programs. Perhaps the last item, which I sometimes refer to as "program ecology," is one which up to now has not been given the consideration due it. This is particularly true with the state institutions which seem somehow to welcome direct duplication and competition with each other in programming, rather than supplementing and reinforcing each other.

The issue of comparative quality of programs, of course, is a highly emotional one and one which must draw upon experts from off-campus for objectivity. I do not have to point out that for a dean, a provost, or president, even after careful examination, to suggest the withdrawal of an academic program brings with it a deep and enduring disenchantment by the faculty, the students, and the many other individuals directly involved in the program, even alumni. The latter discontent most normally takes the form of a letter writing campaign,

as we all well know. Then, too, all of these people have friends in other departments who can become staunch supporters of a threatened program as though it were their own. Yet, if these selective decisions are not made and funds cannot be expanded, then one of two things, or both, can happen: the general quality of the institution will decline in available resources or some programs must be eliminated. Assuming that there is reasonable effectiveness in the support services (which will seldom be conceded by the faculty), what other choices do you realistically have?

The mere suggestion of program review with an outside review element brings with it some fascinating arguments. One is the patently false claim that you cannot save any money by eliminating academic programs. Of course you can! The second is that by selective reductions or eliminations and the subsequent loss of faculty morale and, in turn, productivity in the remaining programs, there is no gain to be had. But in institutions which are floundering in financial difficulty, the medicine prescribed is **not** worse than the infirmity. Finally, it is argued that since the academic administrators are selected largely by the faculty and let go in the same manner, then, if they have an interest in administrative survival, they will not go out of their way to offend faculty by recommending program elimination.

So it would appear that program review is not feasible, even if desirable. But faculty and administrators must understand that there is no satisfactory alternative to such review and appropriate action. Their own welfare is tied inextricably to that of their institution's. Further, they should participate in such meaningful program review lest it be imposed and solely performed externally.

Trustees and State Boards

So the essential ingredient to retrenchment and stability, I argue, is substantially in the academic program area. Yet by the very structure of governance, it becomes extremely difficult to make such selective cuts. Then who can do this? The answer very clearly is those who are assigned the legal responsibility to do so, the individual boards of trustees of the institutions. In Ohio and a number of other states, legislative mandate has now directed those trustees to assume the principal role in internal program review and for the economies and consolidations of strength that can result from it. If they do not assume this role, the only ones left to attempt it are the state coordinating and governing boards and the legislatures in the case of the state-supported institutions. We all have deep concerns about

state agencies making the primary academic and educational decisions in program review. As in any other administrative process, the further removed the authority from the decision point, the less likely that the decisions made will be the most meaningful ones. There are simply too many nuances lost and too many sensitivities and values unprotected in such a process.

Nevertheless, I believe state boards have an essential role to play in program review. But I earnestly hope they are not the only bodies involved in it. Ideally, I think the state's role in program review should complement continuing internal program review, on which trustees should insist. Obviously, no one, including the members of most state boards, wants state government making unilateral program-level academic decisions regarding comparative quality of academic programs. But the state board can insist that this be done and can coordinate the process whereby objective academic experts can review all programs and make meaningful comparisons and judgments.

State-level review can add two important dimensions which are inherently lacking at the institutional level. The first is the needed credibility of an objective which is best achieved by an outside panel, in essence, a "refereed" judgment. In this way a state board can fulfill its "audit" function by assuring that meaningful internal review has been undertaken, responsive to the needs of the state. The second dimension which state-level review can add is that of **comparative** review of programs across institutions in a state system. It is no secret that in many states, for a range of reasons, higher education is presently (or will be shortly with declining enrollments) overexpanded. As an illustration, in Ohio our seven medical schools are now producing more than 1000 medical doctors a year, while steady state replacement needs are projected to be about 300. Only state-level review and coordination can resolve this kind of problem. And only at the state level can agreements be best negotiated to effect reductions, make selective program transfers or mergers, assure proper regional coverage, and so on.

Yet there are those who suggest the state should have **no** role in academic program review. Indeed, the recent Carnegie Foundation report, *The Control of the Campus*, urged that

> In academic matters, the integrity of the campus should be fully protected. State officials should not involve themselves directly in the review of academic programs. Rather, they

should call upon higher learning institutions periodically to assess such programs, and report their findings.

In an ideal world, it might work this way. But this is not an ideal world, and I do not believe it can work — nor is it working this way. But then, I don't believe in Tinkerbell either! While institutions and administrators can and must conduct program review within institutions, unless these reviews are placed in a larger context and audited against a statewide perspective, they will lose much of their meaning.

"New Markets"

Some suggest that our salvation rests in more active participation of other age groups within the educational enterprise. Although we have made substantial inroads into these markets, the figures from these important new activities simply do not bear out the hope that demographic projections can be offset by these activities. Further, I would suggest that the search for "new markets" is not without some serious liabilities. While financial experts have told us that one of the keys to survival in the '80s is to diversify and to seek out new markets, state officials, among others, have not been particularly enthusiastic about this approach, especially when taken to extreme and with some disregard for traditional values of higher education. One immediate problem is that competing institutions seek the same new markets and try to outbid each other, all too often with program quality and, in turn, the student, the victims. Wasteful conflict and duplication and declining quality are fast becoming the order of the day, instead of cooperation, collaboration, and maintenance of standards necessary for survival in the '80s.

At the state level, we continue to see a flurry of activity in developing "nontraditional" and off-campus programs. There are days when it seems the whole curriculum is being put "on wheels." Brain surgery self-taught in the convenience of your own living room! Peel a banana, and you are eligible for "credit for life experience!" No one objects to the goal of making higher education opportunity truly more accessible to our citizens; we are all committed to it. But in too many off-campus and nontraditional ventures, quality is in direct competition with access — and quality is losing! Moreover, we are also observing a willingness of some to lower standards in admissions and retention policies in the scramble for these new markets. This is perhaps the saddest phenomenon of all. It is, as I have observed before, a cruel trick that we all are party to permitting, indeed recruiting to enter colleges and universities students who lack sufficient prepara-

tion to have a reasonable prospect of graduating. Higher education must stop being an accessory to this practice.

The question of quality and the search for "new markets" is a critical one that affects all our colleges and universities. Institutions can hamper or even destroy themselves and at the same time do great harm to their neighbors by gaining reputations for low standards. Higher education is still a quality-intensive enterprise. Institutions should be on warning that state higher education boards and commissions, in fulfilling their "consumer protection" mandates, will insist that it remain so. Gresham's Law must not prevail in higher education.

A New Social Compact

In a speech some three years ago, I urged my former business officer colleagues to direct their attention to the expansion and strengthening of business extension activities, expressing the hope that institutions in this country would turn to this as an important responsibility within their mission. Public service is nothing new within the mission of higher education, but more attention to it can pay dividends to our institutions, directly through business support activities as well as indirectly through the expansion of their local economies. Both, in turn, will bring stronger public support for higher education.

I continue to see this area as our most significant potential growth industry. While the reception I received to this message at the time was at best mixed, the past several years have seen a tremendous growth of interest in this area. It is one which will strengthen higher education's position in society. In Ohio we have chosen to call this activity a "new social compact," and we are now in the process of working with the legislature to develop support for a comprehensive business, education, and government alliance, analogous to the agricultural extension service, involving all of our colleges and universities that wish to participate, both private and public.

But this area of activity also is not without its liabilities. Like every major new thrust, it runs the risk of being oversold. Public expectations can be heightened beyond what colleges and universities can deliver. Further, institutions must consider very carefully how much added public service is really consistent with their educational and research missions. Much of the "research" people are talking about in this new thrust is not really research as the higher educational

community defines it. Rather, it is development and production — and of dubious interest to our universities and colleges. Institutions must look for **harmonies** between their missions and the needs of their localities and states, serving only those needs, while not compromising the quality and strengths of higher education.

A new and loud cry for "high technology" is being portrayed by many as the economic salvation to each of our states. The thought is that each institution will develop its own research park, attracting high tech industries adjacent to its campus which, in turn, will hire thousands of people, with a resultant rebirth of the economic bases of each state. Although attractive to every chamber of commerce, this proposal suggests a frightfully shallow understanding of both higher education and the new industries. I have to believe most advocates simply do not understand what high technology is, beyond two buzz words meaning the incremental development of some of our more sophisticated technologies within this country, particularly many which are electronically and computer based.

I do see a critical need for all of our institutions to develop more and more sophisticated graduates, in the two-year technical programs as well as the two-year, four-year, and graduate professional programs which will support the further development of our economy and our technologies. Such activities are directly linked to the economic health of this nation. However, I do not see "high technology" which is fast becoming a euphuism for economic prosperity and the associated research park as the salvation of our economic crisis in higher education. There are too few institutions of such excellence to attract such industries and too few industries to go around. There are, however, plenty of other tasks for higher education to pursue to reinforce the economy — through instruction and training, through research, through knowledge transfer, through direct services, through consultation. The extent to which these business and industry linkages will work will depend upon the cooperation we can achieve and the mutual interests we can identify — not how many research or industrial parks we develop.

Quality

At several points during my remarks — on program review and on the search for new student markets — I have raised the issue of quality. The subject of financial survival in the 1980s simply cannot be addressed without emphasizing that educational quality is survival. And that is the real issue and challenge of the years immediately

ahead. Without excellence, without emphasis on quality — which is what higher education really is about — we need not concern ourselves about survival. After all, what survives must be worthy of preservation. The challenge before us, before nearly all colleges and universities, is not one of solely institutional survival, rather how to maintain, even enhance, our very purpose — quality educational, research, and service programs. The answer lies not in the variety of "quick fixes" we hear about so frequently but rather in the determined, comprehensive review of academic programs and concomitant change and refinement of mission; cooperative and efficient relationships with neighboring institutions; the development of efficient support activities; seeking mutually beneficial relationships with business, industry, and government; and, most of all, an unswerving allegiance to the traditional goal of excellence in higher learning.

CHAPTER 3

Survival in the 1980s: Institutional Perspective

R. E. Lieuallen

My former colleagues in Oregon's System of Higher Education would be surprised — and a little alarmed — by my presumption to describe **their** perspective of, their response to, fiscal stress. On the other hand, they exhibited no restraint in expressing their reactions to me during fifteen years of increasing fiscal stress when we were working together. So I will forego any apologies for my appearance on their behalf today.

You might be surprised by my reference to **fifteen years** of fiscal stress. After all, the current economic recession has a much shorter lifespan. It seems clear to me, however, that in much of the nation, the economic recession is only one of two major causes of the depression in higher education support. The other major cause is a shift in public priorities. The conviction that the public provision of opportunity for our people to go to college constitutes an essential ingredient of an ever-improving society has begun to wane.

Dr. R. E. Lieuallen is Chancellor and Professor Emeritus, Oregon State System of Higher Education.

The egalitarian drive to provide for the needs of the sick, the poor, the hungry, and the aging, on the other hand, has been surging. I applaud the humanitarian drive to care more effectively for the disadvantaged in our society. And, insofar as senior citizens are included in this group, I have a vested interest. But we must do more than **maintain** our human resources. We must also continue our investment in the coming generations. Going to college increasingly is viewed as an elitist activity. It is viewed as desirable, but it is occupying a lower rung on society's ladder of priorities.

I want to illustrate the extent to which public priorities have shifted in Oregon. Fifteen years ago, the state's eight colleges and universities received about $11 out of each $1,000 of personal income. By 1980 this share had dropped by 24 percent to $8.30 per $1,000 of personal income. During the same period the share assigned to the Department of Human Resources, that is, to the sick, the poor, the hungry, the aging — and the criminal — had risen by about 60 percent. The State System had dropped by 24 percent.

Some of you who know I was Chancellor during those fifteen years might make an uncharitable observation about cause and effect. Actually, many states report similar, if not identical, shifts in priorities, that is, shifts in priorities as illustrated by the way we spend our money. The priority shift alone, of course, would not have produced the current magnitude of the depression in higher education funding. The juxtaposition of the shift in priorities with the nationwide economic depression and the extra-severity of that depression in many parts of the nation combined to create our current circumstances.

The Importance of Development

Thus, we must beware of dependence solely on an improving economy to restore fiscal health to higher education. In addition, we must somehow strengthen the conviction that our long-term capacity to meet the needs of the nation's disadvantaged and to improve the quality of life for all of us depends upon the **development,** not just the **maintenance,** of our human resources. These human resources are developed primarily in our schools, colleges, and universities. A lesson this nation taught the world is that education is the basic building block for economic and cultural health. Our competitors have learned the lesson well. We face the danger of forgetting it.

I am going to devote most of my time to a discussion of how institutions respond to fiscal stress. It would be nice to be able to describe those responses as invariably altruistic rather than occasionally self-serving. You would not believe me, however, if I failed to grasp the fundamental truth that fiscal depression does not always bring out the best in us. For example, substantial support can be generated for program cuts in a time of fiscal stress, as long as those programs are in other parts of the institution or, preferably, in other institutions.

In the main, however, I have only admiration and respect for the capacity of institutional personnel to support those actions necessary to preserve institutional quality in the face of severe budget cutbacks, even though those actions frequently have severe adverse impacts on those who must make the decisions.

Short-Term Actions

The first actions taken by most institutions are short-term actions. They are in response to what are perceived to be temporary budget cuts. Few policy makers are willing initially to urge actions which will be difficult to reverse. Rather, they are inclined to hope for an early turn-around in the fiscal circumstances and to adopt temporary measures which can be reversed without permanent damage.

The first such temporary measure is the reduction of nonfaculty expenditures. Book acquisition budgets are reduced, and budgets for services, supplies, and equipment are cut back. Some support and administrative staff are eliminated. Physical plant budgets are pruned. This step, reduction of non-faculty expenditures, is justified on the grounds that it can buy time until the fiscal crisis eases or, of course, until more permanent and more fitting responses to long-term budget cuts can be devised.

A common next short-term step is to reduce the number of untenured and nontenure-track faculty. Part-time faculty, adjunct faculty, and faculty on term appointments become the immediate targets. On the assumption that tenured and tenure-track faculty constitute the base on which the quality of an institution is built, nontenured faculty become vulnerable first. And I share that assumption with institutional colleagues. The quality of an institution **is** based on those tenured and tenure-track faculty.

When it becomes clear that the sharp reductions in non-faculty expenditures and in untenured and nontenure-track faculty are insufficient to cope with the magnitude of fiscal stress, institutions tend to look to tuition as a means of preserving quality. The timing of this action depends largely on whether tuition already is perceived to be relatively high or relatively low. In Oregon, tuition was relatively high when the recession became severe. It had climbed during those fifteen years when the fiscal priorities were shifting away from the State's four-year colleges and universities. Thus, tapping the tuition till **followed** reductions in non-faculty expenditures and reductions in untenured and nontenure-track faculty. It may be a myth that tuition increases are short-term actions and that tuition can be rolled back when the fiscal climate improves. But it is a popular myth.

One of the least desirable short-term responses to fiscal stress is reduction of faculty salaries — or, at least, a reduction in scheduled increases. To the great credit of faculty groups, they often will choose to share the burden of budget cuts rather than to expose their colleagues to termination on short notice. Salary reduction is the least desirable short-term response to fiscal stress because it is discriminatory unless other public employees also share in that response. It is an unacceptable long-term response because of quality erosion inevitably accompanying such action. Faculty members are willing to accept **temporary** reductions in pay to protect their colleagues. Able faculty members are unwilling to accept **permanent** reductions in pay, and if those reductions occur anyway, they will move to better paying positions. They will follow the example of Willie Sutton and go where the money is.

The Erosion of Quality

These actions constitute about all of the reasonable short-term responses. To the extent that the fiscal crisis is of short duration, these actions should not erode quality to any significant extent, at least that appears to be the view of my institutional colleagues. Library, equipment, supplies, salary, and physical plant budgets readily can be restored. Faculty positions which customarily are filled on a non-permanent basis can be filled again. Tuition increases can be rolled back.

If, however, it becomes evident that the budget cuts are going to be continued over an extended period of time, some of these short-term responses must be reversed. If library, equipment, supplies, and salary budgets are **not** restored, quality of education inevitably **will**

erode. If physical plant budgets are not restored, the long-term consequences will be disastrous.

Other more appropriate responses become essential and urgent. Tuition increases, intended to be temporary, become permanent. Access thus is eroded and on an undesirable basis. But quality tends to be preserved for those who remain. Another long-term response is the narrowing of institutional missions and the elimination of duplicating and over-lapping courses and programs. Courses and programs tend to proliferate and missions tend to expand when institutions are growing and when budgets are generous. A common result is that some courses and some programs are under-enrolled. Careful pruning of courses and programs will reduce costs and preserve quality in the programs that remain. In the process, some tenured faculty, under the rubric of program reduction, may be terminated. Declining budgets encourage institutions to engage in cooperative educational planning within states.

When a mechanism is in place to permit effective educational planning across institutional lines, under-enrolled duplicating and over-lapping programs **among** institutions, not just **within** an institution, can be eliminated. No institution any longer can expect to be all things to all students — if it ever could. As institutions narrow their missions in order to do fewer things better, students, in selecting the institutions they attend, must pay increasing attention to what is offered.

Multi-state Cooperation

Cooperative educational planning should not be confined to individual states. Many states have established more graduate and professional programs, and some undergraduate programs, than are justified by either student or societal need. **Regions** now are engaging in cooperative educational planning, especially at the graduate and professional school levels. The Western Interstate Commission for Higher Education is encouraging such regional planning for the thirteen states in the WICHE Compact.

Five years ago, with funding from the Carnegie Foundation, WICHE established a five-state demonstration project, covering Alaska, Idaho, Montana, Washington, and Oregon. Graduate and professional programs are selected within the five-state area for designation as regional programs. Institutions operating programs

thus selected agree to accept students from anywhere in the five-state region and enroll them at resident tuition rates. Benefits to the home institutions include enhanced status, with accompanying improved opportunities for acquisition of grants; high quality faculty members; and able students. If the programs are under-enrolled, the larger enrollment base permits a more efficient operation. For states not having the programs, a benefit is their newly acquired ability to make the programs available to their students at resident tuition rates without a large investment in facilities, faculty, and equipment. A chief benefit to the region is increased efficiency through inter-state academic planning, resulting, it is hoped, in reduced program proliferation.

Another action commonly perceived to be essential to the preservation of quality is raising admission standards. The reduction in the number of faculty members and the reduction in nonfaculty expenditures can be countered in part by reducing the number of students. Raising admission requirements, along with the increase in tuition, reduces access and the numbers to be served.

If all of these steps have been explored and either taken or rejected and the budget crisis remains, it may be necessary to declare a state of financial emergency and terminate additional tenured faculty. As all of you are acutely aware, institutions are extremely reluctant to take this action, both because of the inevitable litigation which results and the damage it does to institutional reputations. The ultimate traumatic step is to close an institution or institutions.

Early in my remarks I noted that severe budget crises do not always bring out the best in us. Illustrative of this human tendency is the clamor in Oregon to close one of the System's institutions — as long as it is one of the others and as long as the resources thus saved are used to bolster the fortunes of another favorite college or university. Actually, as many writers have made clear, one of the most difficult and counter-intuitive discoveries is how much in the short-term it **costs,** not saves, to close down an institution. Unless it is clear that the institution is surplus to the State's requirements **in the long, long term,** closing an institution may prove to be counterproductive. Only if enrollment declines are large and appear to be relatively permanent should institutions be closed.

The Myth of More with Less

One of the myths influencing governors, legislators, and even some regents is the myth of doing more with less. How many governors

and legislators and regents have exhorted college and university faculty and administrators to do more with less? It is true that, with careful state and regional planning, some programs can be reduced or eliminated. It is true that, in some states, the numbers to be served can be reduced by increasing admission requirements. It is true that increasing tuition will not only produce more revenue but also will screen out some of the less affluent.

We have not yet discovered, however, a substitute for money to buy quality in higher education. More money does not guarantee more quality, but the lack of money guarantees eventual mediocrity. Institutions cannot acquire and retain quality faculty members without adequate resources. They cannot buy adequate library books and services without adequate resources. And the same generality applies to state-of-the-art equipment, to support staff and services, and to physical plant maintenance and rehabilitation.

It must be made clear that rather than doing more with less we will be doing **less** with less. And in the process we will be eating our seed corn to the inevitable disadvantage of the next generation.

CHAPTER 4

Conversations With E.Z.

Harold L. Enarson

Harold Macmillan once described a British Foreign Secretary as a man "forever poised between a cliche and an indiscretion." It is a fair description of college and university presidents, who oscillate between the daily burden of cautious commentary and the evening pleasures of indiscreet confessions with spouses or colleagues.

Do I miss those late night sessions with fellow presidents also enduring what is pretentiously described as the "splendid agony" of the presidency? Definitely — especially when I recall the brutal honesty, the finely honed integrity, which emerges in hotel rooms late at night when presidents tell one another what they **really** think — about **their** student newspaper, **their** local press, and yes, what they think about SHEEO and NCHEMS and academic researchers who talk about "measurable outcomes."

Dr. Harold L. Enarson is President Emeritus, The Ohio State University and Carl Hatch Professor of Public Administration, University of New Mexico.

I can assure you that in these lamentations is found a rich literature of protest, of personal sacrifices unrecorded and unsung, and of calm courage in the face of adversity. As a president I often felt that I too was forever poised between pathos and bathos.

Now once again I teach and am slowly but surely experiencing the variety and challenge of life in academe. I refer, of course, to faculty meetings and to getting a parking permit, library card, and tickets to sports events, and a key to my cell — office I mean. I despair of ever again making a long distance call or having a letter typed. It is boot camp all over, and quick induction into the central values of faculty — a free-floating skepticism about anything that smacks of administration, and the conviction that inspired incompetence is at work everywhere on campus. Call me Professor — the office hours are posted: one and one-half hours once a week, please.

How does one link up the separate worlds of the administrator and the faculty? I am struggling hard to do that and with indifferent success so far. In trying to ready myself for talks such as this I write notes to myself, but in the cold of dawn my notes seem lacking in piety and are not at all helpful in advancing the dialogue — but very revealing. Here are a few samples: Maybe we need a national moratorium on talk of excellence — messy homemakers with piles of dirty laundry and stacks of dirty dishes don't have the temerity to talk of **"Homemaker Excellence."** Or again, "Why this obsession with developing measures of quality? What is there in the quality of our love, our compassion, our courage, our insight that will ever be captured, dissected, measured?"

Sameness in Universities

We exalt the diversity of higher education. Yet there is a sameness in our major universities, some of it a bit scary. Like the Holiday Inns or the Best Westerns, our major universities are much alike.

Yesterday I walked the campus at Arizona State, ate at the cafeteria, read the student newspaper, scanned the notices of meetings, eavesdropped a bit, and studied faces. Does every campus now boast of a fundamentalist preacher shouting dire prophecies of the day of judgment to indifferent students? Suddenly I wondered where all the militants have gone — those beady-eyed souls whose important truths were so often trivialized by their innocence. I miss them; at least they **cared** about public events — little things like nuclear war.

But of the sameness. Our campuses are like our shopping centers and Ronald Reagan's redwood trees. It is as if someone in authority dictated each year the national fad, the national concern, and hence the national agenda for conferences.

In the early 1950s we discovered the "impending tidal waves" of college students and busied ourselves in geting buildings and faculty in place. No time then to fret about the curriculum.

In the post-Sputnik era, the emphasis was on science and technology. Honors programs were "in" as was excellence. In the 1960s, the emphasis shifted to a student-centered curriculum. The buzz word was relevance. Ethnicity was rediscovered. Independent study was exalted; pass-fail grading came in vogue. It was no time to be concerned about the sprawling course offerings.

In the 1970s, the emphasis was on educational opportunity for social justice, on off-campus instruction, on compensatory education, and on the granting of academic credit for work experience. It was no time for serious consideration of the content of the educational experience.

The Tone of the 1980s

In the 1980s the tone is pragmatic — education for careers, career counseling a new burst of specialization. And something else — a pervasive, all-encompassing mood on all those many campuses where the budget has become the overriding obsession. Today, whether in the snow belt, the Pacific coast timber belt, or in recession-wracked states everywhere, the prospects for higher education are thought to be grim. But no time to talk education. If you wish to be an Instant Bore in the faculty club, try getting a serious conversation started about the core curriculum.

The conformist mentality which led us to embrace uncritically every innovation and every fashion now tempts us into pat diagnosis of the 1980s. In educational conferences everywhere one encounters much the same litany of predictions and fears. Shrinking enrollments lie ahead. Only a few more fortunate universities have the lifeboat of relatively stable enrollments. The state budget crunch is now endemic. We are asked to do more with less. The era of expanding aspirations and expanding budgets is over. We are now challenged — so we are told by some — to preside over orderly decline.

The litany of distress is matched by the litany of hope. We try to persuade ourselves that budget cutting can actually strengthen our institutions. As we "slim down" we can be "leaner", "more effective." Deprivation as opportunity — it is Puritanism renascent.

In this new era a new kind of manager is required, one who realistically reassesses programs and skillfully prunes deadwood. Above all, the born-again university president is to have a keen sense of the role of the university as a partner to industry and state government in planning for economic growth.

The conformist wisdom is as conformist in prescription as it is in diagnosis. We are to embrace planning at the state level, the campus level, the college and departmental level. Planning requires data — the more data the better: good management requires it, and political accountability demands it. Orderly planning requires, of course, that universities determine priorities. After all, everything cannot be of equal value: some programs and services **must** be less important than others. (Just as at home you recognize that your children are not of equal value and so inform them — Right?) Once the criteria are established and the data collected and analyzed, some programs (and the aspirations of some faculty and some clients) must necessarily be savaged.

The managerial tone has an intimidating magisterial ring to it. It carries with it the reality that goes with data, the authenticity that goes with logical problem solving, and the cool neutrality that goes with modern management. In the background is the quiet hum of computers. And the data — always the data — signifying death for some programs and a reprieve for others. Oh, yes — and all done "collegially," with the **active** participation of the faculty.

The Onset of Fiscal Stress

In the early stages of **fiscal stress** (to use the delicate phrase) the president sounds the alarm. The faculty stirs uneasily and turns aside. Later, as the cuts begin to be felt, all that is treasured, including the self-image of faculty, is in sudden jeopardy.

The world outside campus walls, it is discovered, may not grasp the importance of the library or tenure or sabbaticals or the University Press or Chinese literature or post-doctoral exploration of arcane matters. The strong fabric of collegiality which was thought to make a university a community of scholars and a very special place turns out to be cobweb-thin. Protection of turf and tenure become the name of

the game. Campus issues and interinstitutional rivalries surface in newspapers and television.

Quality, legislators and governors are told, is being sacrificed — presumably on the altar of expediency. The response from political leaders is often equally vehement and equally simplistic. "Higher Education," we are told, is "just another state service" — "has grown fat over the years" — "has confused quality with the status quo."

In the near future, declining enrollments coupled with underfunding will make retrenchment a way of life. Retrenchment is dull, foot-slogging work.

It requires large-scale reallocation of resources — not one-time but annually.

It requires searching out small savings everywhere. It means fewer light bulbs, fewer zerox copies, fewer secretaries, fewer duplicates in the libraries, fewer trips, fewer memberships, fewer free tickets to the game for friends of the university.

Budget-cutting poses difficult problems in equity and efficiency. It is tempting to cut support services deeply, avoiding the harder task of cutting out entire programs.

The Role of Administrators

As they go about this dreary business, presidents should avoid posturing in an effort to dramatize the budget crunch. Forfeiting a percentage of the salaries of the president and the vice presidents, mortgaging land, and tapping the endowment are steps sure to backfire. Similarly, restraint in language is essential. On a university campus, of all places, it should be unnecessary to indulge in tiresome cliches such as "cutting to the bone and muscle." Exaggeration defeats itself. If today's cut is "devastating" what adjective have you in reserve for tomorrow's deeper cut?

It is the vice presidents, deans, and departmental chairs who must cushion cuts so as to inflict the least damage. Major reallocation of resources is the responsibility of central administration, along with the faculty in an advisory role.

As one reviews the history of faculty participation in budget cutting exercises, it is clear that there are dangers as well as advantages. It is so easy to create warring factions within a university and so very difficult to bring the quiet voice of reason to issues that have become greatly inflamed. It is so easy to promise the death of academic departments and programs and so difficult to deliver

substantial savings. It is easy to excite a campus community and so very hard to calm it. It is easy, in sum, to incur the costs that often accompany widespread participation (anger, bitterness, community intervention) and earn only a modest benefit, if any.

In a time of shrinking resources, the university community must move aggressively on both internal and external fronts. Internally it is essential to avoid irreversible decisions. The university can slow its purchases of books and scientific equipment. It can pull inventories down to low levels. It can scrimp on employee compensation for a time. All these are reversible decisions. The ending of an academic program is irreversible.

Tough, demanding management is a task for all seasons. In a time of fiscal stringency, universities are derelict if they do not face up to issues long neglected — low teaching loads, inexcusably small classes, inefficient use of classroom facilities, duplication of library materials, and specialized equipment. But in every budget cutting exercise, there comes a time when the quality built up over decades is easily dissipated when salaries lag, equipment becomes obsolete, and the support system weakens.

It will not do to remain silent when the basic health of the university is truly in danger. If it is our professional obligation to enforce budget cuts in ways that inflict the least damage, it is our even greater obligation to press the case for necessary funding.

Some Failures

But what **is** the case for adequate funding? And why is it that so often our arguments fall on deaf ears? Is it that we cannot document the "value-added" by higher education, cannot define quality in education in ways that satisfy the tidy-minded? I think not.

Recent public opinion polls show clearly that the public continues to believe in higher education. But they are aware of our failures. It is no longer a secret that many students enrolled in college are unprepared for college level work, that the college experience does not equip many students with skills in reading, writing, and critical thinking.

It ought to give us pause that many of our harshest critics are our very own graduates. They are not easily fooled. They have experienced the campus bureaucracy and red tape, instruction by unprepared

teaching assistants, extreme of specialization, and course requirements that seemed to make little sense. Our very own graduates now occupy the commanding heights of legislative and executive offices and in public life generally. Do not lecture them on the values of liberal education, of the virtues of good citizenship, of the shaping of a social conscience lest you risk their cynical laughter.

On the campus itself are found the deepest wells of cynicism. Students eager to get by are not eager to blow the whistle on incompetent faculty. The grade is the thing. Young, untenured faculty members are not likely to fault the tenure system. Visions of the sugar plum of job security dance in their heads. As for those tribal chieftans, the deans of the respective colleges, their overriding interest is in protecting their turf. It is a rare dean of a professional college who is willing to enter into serious discussions about university-wide curricula issues.

Academic administrators too have their place in this precarious balance of forces. They are expected by regents, legislators, and the public to defend the enterprise — but not too vigorously, never stridently, certainly never to the last ditch. They are to innovate in small matters but to assert the rights of the faithful in the conventional operation of the university. And always, the larger concerns about the quality of education, the role of the university in the life of the community and the state, are to be left to others — unnamed.

The Regents or Trustees? They are to hire and fire presidents and coaches, okay budgets, and sign off on capital improvements. But educational policy — they are told tactfully — is off limits. The making of educational policy begins and ends with the faculty.

It was midnight as I wrote the sentence above, stared tiredly at it, then found what was wrong with it. Faculty not only **make** educational policy, but they **carry it out.** No one else develops the course outline, meets the classes, grades the papers, does the research, applies the rules, upholds the standards.

"E.Z." Is the Name

The door to my basement study opened slowly. A strange creature. Nothing **human** here except the garb. Those hateful maize and blue colors of Michigan. Has the "school up north" been captured by travelers from a distant plant? He/she was smiling . . . "E.Z." is the name, "It said, Cousin of E.T." (strong coffee and weariness play

strange tricks on emeriti). "Now about educational policy. Where do I find it? And the policy makers? Where do I find them?"

I began explanations that became ever more labored. Why always "Blue-ribbon" committees? No purples, aquamarines? And the differences between a task force and a committee? And accreditation — what exactly is that? Collegiality — could not a single word have a single meaning? E.Z. asked this with just a trace of asperity.

It was 2:00 a.m., and I had worked through the ACE, NASULGC, the NCHEMS, NCAA, SHEEO, the faculty rule book, A-21, the role of superstructures in multi-campus universities, and the recent discovery of strategic planning. All easy certitudes melted away in the telling. I was babbling, and I knew it. E.Z. had asked, "if you have experience in doing less with more, why is it so hard now to do more with less?"

Well, really, how do you educate an obstreperous, pestiferous nag from some distant planet? I spoke of collegiality and collective bargaining, of the role of faculty in participatory management, of entrenched interests. E.Z. frowned. Or was this a planetary look of incredulity? I gave E.Z. the whole load — how intelligent, gifted folks were putting inputs into FTEs to turn them into desired outcomes with measurable value added.

Perhaps I dozed a bit. The room was cold. E.Z. was gone. Scrawled on my notes in messy handwriting, strangely like that of my wife, was this message: "Being short of money is bad but not as bad as being short of ideas. What can be done to improve quality that would not be an added drain on the budget?"

Well, one could rediscover, really recreate, the sense of community on campus. Administrators could discard long memos in favor of short phone calls. Anyone angry with anyone could invite an enemy-in-the-making to lunch. Red tape, the Virginia creeper of the academic vineyard, could be cut back. And above, all professors could catch that deep inner rhythm of the university which makes academic life at its peak so deeply rewarding.

Some Things To Be Done

It isn't that we don't know what to do. It is that we lack the courage to do what we know needs to be done — this at every level.

We know that pre-college curricula must be defined, that

admission standards need tightening, that academic performance in every area must be improved. Only the faculy can do that. And it won't cost anything.

We know that there must be more care and concern for the individual student. More faculty involvement in career counseling is imperative. Again, primarily a faculty responsibility. And it won't cost anything.

We know that the trend toward specialization and the fragmentation of the academic program has to be stopped and the process reversed. The revitalization of the core curriculum is the urgent first charge of the faculty, necessarily with strong support and encouragement from administrators. And it won't cost anything.

We know that complicated superstructures are likely to create more problems than they resolve. Administration at all levels must be kept lean, thin, and hungry. And we could save some money devoted to overhead.

We know that long-range academic plans can easily become exercises in evasion. It is not more data that is needed but the courage to act on data already in hand. Academic leaders who do not know which programs need constraint and which need encouragement ought not to be in the job. And that doesn't cost anything — except effort.

We know that universities need financial incentives, not disincentives, for the building of quality. Surely there is the talent in the organizations represented in this conference to develop workable incentives.

We know — or should know — that our morale is not something externally imposed upon us by a cruel fate. In our daily lives as teachers, administrators, and colleagues we define the university even as we define ourselves. In our universities, blessed with academic freedom and with resources that are the envy of every nation, there can be no excuse for self-pity. We are each custodians of our own morale. No budget item here.

We know — or should know — that there is more freedom within the university than we have the courage to accept. It is in the quality of our daily service that each of us either weakens or enobles the university.

Long ago, a British jurist wrote of what he called the "domain of obedience to the unenforceable." It is that domain where conscience is summoned to command, where personal responsibility, courtesy, decency, civility, thoughtfulness is called into play. It is in this domain that the tone and texture of a university — and yes, its integrity — is best defined.

The integrity of poem or plan, book or lawyers' brief, of the great ship or the tiny sailboat, resides in its wholeness. For a thing to have integrity it must be spare and clean, without frills, pretensions, excess baggage. It must be true to its purpose, true in grand design, and faithful in minute execution.

With integrity all else comes — quality, excellence, and just possibly money.

Oh yes, if you talk with E.Z. — you might tell him/her just that.

PART III

EXCELLENCE IN HIGHER EDUCATION

CHAPTER 5

Challenges of Excellence in Higher Education

David Pierpont Gardner

It has been suggested that my remarks today focus on excellence in education, especially because of my connection this past year with the work of the National Commission on Excellence in Education.

The Commission, appointed by Secretary Bell in August of 1981, is composed of eighteen members whose experience with the nation's educational enterprise, its purposes, processes, financing, politics, and governance is both personal and wide-ranging. It includes teachers, principals, superintendents, and school board members at the local and state levels, professors, a Nobel laureate, university presidents, a business leader, and a governor, among others.

The Commission's charge is to 1) assess the quality of our nation's schools and colleges, 2) compare and contrast education in the United States with the educational systems in several advanced industrial countries, 3) study how college and university admission requirements have impacted the high school curriculum and the converse, 4) identify and study schools and education programs that are successful as well as those that are not, 5) assess how major social changes in the last quarter century have affected student achievement

Dr. David Pierpont Gardner is President of the University of Utah and Chairman, The National Commission of Education.

and the schools, and 6) make practical recommendations for action intended to improve the quality of schooling in America with a special emphasis on the education of teen-aged youth.

As you can readily determine from this summary of its charge, the Commission does not want for a challenging assignment. In contrast to most of the more than twenty-five national studies currently underway on some aspect of American education, the Commission intends to generate relatively little in the way of new research. Rather, it has been gathering and evaluating existing research findings and field experiences and synthesizing these findings, together with solicited and volunteered testimony and commissioned papers. The report of the Commission will be submitted to Secretary Bell and President Reagan in the spring of 1983.

The Commission has now completed the six major public hearings it had scheduled to be held around the country and the several site visits, symposia, panels, and full Commission meetings on various topics; and we are in the preliminary phase of writing about our findings and conclusions regarding them. Our recommendations will be formulated in the following phase of our work. While I am not at present able to report on the opinions of the Commission on these matters, I do wish to draw upon some of the testimony presented to the Commission and to offer some personal observations about the condition of education in America today.

While most of you are interested primarily in higher education, I wish to speak to issues of concern at all levels of education and to draw what I believe to be important connections between them and higher education. As we all know, we in higher education tend not to concern ourselves, at least in very direct ways, with the central issues facing the schools. Yet the condition of the schools bears very directly upon higher education's present state and future prospects, and a genuinely cooperative effort on the part of both parties will be required if our society is to cope with, and perhaps even solve, the educational problems our country is facing at present.

Testimony on the State of American Education

The American educational system has long enjoyed a deserved reputation for both its egalitarian accomplishments and the excellence of its program and product. From the days of Thomas Jefferson's proposal to the Virginia legislature, to Horace Mann's crusade for the common schools, to John Dewey's eloquent advocacy

for the public schools, and to our more recent effort dramatically to expand access to our schools and colleges, this country's educational effort stands as an enviable, albeit imperfect, record of solid achievement.

The egalitarian dimension of American life and character, as noted by the young French aristocrat Alexis de Tocqueville and other observers, has been and will continue to be a pervasive and important characteristic of our evolving educational system. An equally important dimension of American life and its educational system has been the seeking of authentic distinction or excellence within an educational endeavor that continues to open its doors to accommodate an ever-widening circle of our country's citizens without regard to sex, ethnicity, age, or religion.

Our schools and colleges serve a much larger segment of the school-age population than do most other countries. Nevertheless, we have produced individuals as able as a percentage of the school-going pool as has any nation, irrespective of the pool's size. Dr. Thorsten Husen of the Institute of International Education at the University of Stockholm, Sweden testified before the Commission and reported that the top 9 percent of American secondary school students perform just as well on standardized achievement tests as the top 9 percent in other industrialized countries whose school systems are far more selective. Similarly, our colleges and universities, which admit a far larger proportion of 18-year-olds than other countries, produce exceptionally able students and sponsor graduate and research programs that are regarded as the finest in the world. Why, then, in view of this generally exemplary record, is excellence in education an issue of intense interest today?

Public confidence in education, at least as measured by opinion polls, has recently shown significant declines which go well beyond normal cyclical patterns. For example, the Gallup Poll found that in 1974 approximately two-thirds of parents with public school children felt that their local schools were superior or above average. In 1979, the percentage responding favorably dropped below 50 percent.

The sources of such dissatisfaction, it seems, tend to be increasingly associated with issues of educational quality. A recent Washington Post/ABC News Poll indicates, for example, that about four parents in ten of high school or near high school age students criticize educators for offering "pass through" education, for having unmotivated teachers, and for grade inflation. A similar level of support was

accorded the statement, "too many students are allowed to graduate from high school without learning very much." Students seem to agree. Professor Sandy Austin's annual survey of entering freshmen reveals, for example, that nearly 60 percent of 1981 freshmen agree that "grading in the high schools has become too easy."

Another source of general concern, widely publicized in recent years, has been the decline in standardized aptitude test scores. In 1963 the average SAT verbal score was 478, and the average math score was 502. By 1981, the verbal score had declined 54 points and the math scores 36 points, although 1982 tests have gone up two and one points respectively. The number and proportion of high scoring students on the SAT have similarly fallen, particularly over the past eight to ten years, e.g., the number of seniors who scored over 650 fell from 53,800 or 5.3 percent in 1972 to 29,000 or 2.9 percent in 1980.

Teaching of Science and Mathematics

Against this backdrop of general concern over declining quality as reflected in this and other indicators, I wish to draw on testimony given at some of the six regional hearings of the Commission.

At the Commission's hearings on science, mathematics, and technology education, held at Stanford University last March, several areas of concern emerged:

1. Since 1970, high-school graduation requirements have been reduced throughout the country. Only one-third of the nation's 16,000 school districts, for example, now require more than one year of mathematics and science for graduation.

2. Of the roughly three million students who graduate from high school each year, about one-third have completed three years of mathematics and only one-fifth have completed three years of science. Only 10 percent have taken physics and 8 percent calculus. Of the students in a general or a vocational curriculum — 60 percent of all students — only one-fifth graduate with three years of mathematics, and one-tenth graduate with three years of science.

3. By contrast, in Japanese secondary schools, where nearly all of the college-bound students take three natural science courses and four mathematics courses during their three-year high school career, 13-year-olds have the highest math achievement scores among 12 countries, including the United States.

4. In 1980, thirty-four states reported a shortage of mathematics teachers; by 1981, the number of states reporting a shortage had grown to forty-three. Similar teacher shortages exist for the physical sciences.

5. During the 1970s, there was a 77 percent decline nationwide in the number of secondary school mathematics teachers being trained and a 65 percent decline in the number of secondary school science teachers being trained.

6. The trained teachers who are in the classroom are leaving at an increasing rate. In 1981, almost five times more science and mathematics teachers left to take nonteaching jobs than left to retire. The replacements for these trained teachers are often less adequately prepared than those they replace. For example, of the teachers newly employed in 1981-82 to teach high-school mathematics or science, 50 percent were teaching with emergency certificates. In the Pacific states, 84 percent of all high-school science and mathematics teachers have only emergency certificates.

7. At the postsecondary level, the number of doctorate degrees granted to United States citizens in engineering continues to decline. The National Academy of Engineering reports that engineering and computer faculties are critically understaffed, and there appears to be little prospect for early improvement. The Academy further reports that facilities needed to conduct research and to train engineering and science graduates are becoming obsolete, and the apparatus to instruct students in state-of-the-art practice is unevenly available and, when available, increasingly dated.

8. Remedial mathematics courses in public four-year colleges increased by 72 percent between 1975 and 1980 and now constitute one-quarter of all the math courses taught in those institutions. At two-year colleges, 42 percent of the math courses are remedial (i.e., below college algebra).

Concerns in Language and Literacy

The Commission's hearing on Language and Literacy, held in Houston last April, revealed other equally salient concerns:

1. Professor Richard Anderson of the University of Illinois' Center for the Study of Reading presented persuasive evidence on the diminished level of readability and difficulty of most school textbooks

today compared with those of earlier years and the negative effect this has had upon the reading comprehension of students.

2. In an era of increasing internationalism in business, trade, government and education, foreign language instruction in this country is geared toward minimal levels of competency, and a much smaller proportion of young people both in the grades and in higher education are studying foreign languages than in earlier years. Countries that do educate students in a second language devote a much longer period of time to language training than do we and with more meaningful and demonstrably superior results. Moreover, they commonly begin the study of foreign languages in the elementary grades and continue such studies throughout a student's entire schooling.

3. Data from the National Assessment of Educational Progress and from the National Institute of Education's Compensatory Education Study indicate that while reading instruction in the elementary grades is relatively effective and continues to improve, the performance of secondary students, particularly in higher order reading comprehension skills, is much less encouraging.

Issues in Teacher Education

The Commission's hearing on teacher education illuminated deeply troubling issues of teacher recruitment, retention, and professional development:

1. Data from the National Longitudinal Study indicate that college seniors who majored in education ranked fourteenth out of sixteen majors on SAT verbal scores. Only seniors studying in office clerical and vocational/technical fields scored lower. For SAT math scores, graduating education majors ranked fifteenth out of sixteen fields.

Between 40 and 50 percent of those employed as first-year teachers this year will not be teaching seven years from now; furthermore, two-thirds to three-fourths of those who do leave will do so in the first four years of teaching.

2. Several studies have shown a differential rate in the retention of those teachers who are highest in measured academic ability and those who are lowest. Some studies indicate, for example, that those who are in the highest quarter of measured academic ability are twice

as likely to leave teaching as those who score in the lowest quarter.

3. The teaching role in our schools is largely undifferentiated, i.e., there tends not to be a clear, well-established career path for teachers leading to greater professional responsibility and increased financial reward, a condition discouraging to incumbent teachers and to those contemplating entering the profession.

The information cited here, of course, is unelaborated, unanalyzed, subject to interpretation, and illustrative only. Moreover, my citing of this information is not intended to convey an undue sense of pessimism about our educational condition nor is it intended to ignore the exemplary efforts we found in many areas throughout the country. Even though our problems run deep and wide, our schools retain the capacity and, if encouraged and helped by interested parents, school boards, and legislators, the will and the morale sufficient to redress them. Permit me to cite examples of encouraging educational initiatives with which we were made acquainted.

1. Several states, including Minnesota, Maryland, Florida, and California, have launched cooperative and systematic efforts to strengthen high-school science education. The "Minnesota Wellspring" program, for example, is a cooperative enterprise of the state, the University of Minnesota, and the high schools of the state to expand and enrich high-school science curricula.

2. Research and pilot programs on writing skills have revealed some very successful programs at both elementary and collegiate levels. Experimental writing programs in Vermont in grades one through four, which emphasize constant revisions in writing exercises, have revealed surprising levels of writing ability and have demonstrated how reading and writing skills can develop in tandem and reinforce each other. At the collegiate level, very successful programs which emphasize outreach to the schools and infuse writing across the college curriculum, as opposed to confining such instruction to English, have been adopted at such institutions as the University of Michigan, UCLA, and the University of Texas.

3. There are also very encouraging signs of high-school students' willingness to take more demanding subjects such as foreign languages, mathematics, and science. Colleges and universities, which quite frankly encouraged students to take the easier rather than the more exacting courses by offering remedial course work as part of their regular curriculum and by not infrequently relaxing their standards

for admission, are for the first time in many years beginning to review such standards with an eye toward strengthening them — Ohio, California, Kentucky, and Utah are examples.

I wish now to step back for a moment and look at excellence in education more broadly and with the hope of advancing policies which will foster widespread excellence in our nation's schools and colleges.

Of the many issues that one might raise, I wish to focus on but four: 1) the ties that bind elementary and secondary education to higher education, 2) the importance of encouraging and supporting initiatives which foster excellence at all educational levels, 3) the necessity of making hard choices among competing claims for educational resources, and 4) the conditions that will be supportive of policy changes intended to advance educational excellence.

The Two Worlds of Public and Higher Education

Those of us engaged in higher education have historically tended to regard the problems in elementary and secondary education as being remote and only tangential to our own principal interests. To be sure, we have added our voices to those of others who have been lamenting the decline in test scores and other indices of reduced preparedness among high-school students. Our concern, however, tends to stop with its expression. We rarely translate our apprehensions into a more constructive effort calculated to develop ties with the public schools. There are exceptions, of course. For example, the 1945 Harvard committee report on *General Education in a Free Society* dealt with Harvard College's general education program. It also devoted a very significant portion of that report to education issues generally and to the curriculum of the secondary schools more particularly.

Moreover, many states have initiated efforts aimed at articulating curricula, e.g., the development of a more clearly defined and articulated mathematics curriculum at elementary, secondary, and postsecondary levels. From what I have observed, these types of activities are on the increase both at a state level and between individual colleges and universities and their principal feeder schools, but we have a long way to go.

Institutions of higher education could do much more to strengthen the ties between the schools and themselves through teacher education programs. For example, the University of Utah recently announced a

new, comprehensive set of admission requirements to be effective with the entering freshman class. These announced requirements have already and very directly affected the schools in the form of significant changes that have occurred in student course selection this term compared with a year ago, i.e., the demand for mathematics, science, and foreign language classes has increased substantially. While the schools were consulted in the formulation of these new admissions policies, and have generally welcomed them, the impact on the schools is, nevertheless, quite consequential. We shall be working cooperatively with the State Board of Education in order to secure state funding for the upgrading of teacher skills and preparedness in areas of critical shortage, to induce a larger number of University students to choose teaching as a career, and to assure that in-service education is responsive as much to the needs of the schools as it is to the interests of the teachers. Similarly, our own teacher education programs deserve careful review and will receive it.

Supporting Initiatives for Excellence

The second area deals with the need of the states and the federal government to be more conscious and supportive of efforts that have been made and will be made to improve the qualitative aspects of schooling at all levels. The mounting national concern over the lack of student preparedness, diluted academic standards, and weakened college entrance requirements is a trend that is sufficiently widespread and intensely shared to hold out the promise of being engaged in behalf of such efforts as may be made to improve the situation. Ironically, the prospect for public support of such changes is occurring at a time when many institutions of higher education face the prospect of major enrollment decline, owing principally to demographics. If an institution, in the face of demographically induced enrollment declines but in consideration of wishing to establish a more exacting and rigorous educational program, raises its classroom standards and its standards of admission, it runs the risk of compounding its enrollment losses and, therefore, of further eroding an already threatened budget.

Sadly, the educational conditions are ripe for improving expectations and standards for quality, yet the methods and practices of funding based largely upon quantitative considerations will tend to mitigate against qualitative judgments that run the risk of bringing about reduced funding. Under these conditions, I fear that there will be strong institutional resistance to the taking of really significant steps, however educationally meritorious, that would weaken an institution's fiscal condition.

Nevertheless, every effort needs to be made to persuade states to take initiatives to foster quality and excellence in education as a matter of state policy; and those of us holding positions of responsibility in higher education should foster and support such efforts as we can. Our failure to do so will weaken the prospect for a favorable outcome by withdrawing our special insight and influence from the debate at the very time when it will be needed for our voices to be heard on the matter. Substantively, you may reasonably ask what might be done? Many of you, I am sure, are aware of initiatives for quality education that have recently been undertaken in Florida. These initiatives include

1. Major salary increases have been authorized for the state university system which are intended to attract and retain quality faculty.

2. A five-year salary plan for teachers at all levels of education in Florida will cause them at the end of that period to be ranked among the top twelve states.

3. A $15 million endowment trust fund established by the legislature to attract top scholars to the state. This is a matching fund allocated to those universities able to raise private gifts for endowed professorships. At least ten new endowed chairs have been jointly funded.

4. A $40 million appropriation to improve quality in the State University System. An emphasis upon the distinctive character and excellence of particular institutions and programs is to be the principal criterion in allocating these funds, e.g., the University of Florida's engineering programs and Florida State University's public administration and fine and performing arts programs were to receive favored support.

5. Funding to diagnose and treat remedial learning problems of students in kindergarten through third grade. The rationale underpinning this allocation of funds arose out of a desire to identify and treat these problems early, thereby avoiding the longer-term costs to the state and deflecting the adverse impact such problems have upon students, the curriculum, and the climate of schooling in the later years.

These types of quality initiatives, spearheaded in the case of Florida by a governor interested in quality education and widely

supported by educators and legislators alike, can generate widespread public support and an enthusiastic boost from business and industry as well. Florida's experience in recruiting new industry and business to the state confirms what has been known generally, that the quality of the state's schools and colleges is an extremely important factor in the willingness of business and industry to locate in an area or to go elsewhere if conditions are educationally unfavorable.

The Range of Functions and Hard Choices

The third issue of concern bears upon the hard choices that need to be made in the allocation of scarce resources among competing needs and wants. The proliferation of courses and programs which has characterized the development of American schools and colleges arose, in part, in response to what was perceived to be an inappropriately narrow nineteenth century curriculum. Thus, in our schools today we have courses in character education, consumer education, distributive education, driver education, sex education, family education, and safety education — as though the schools are and should be responsible for educating about every aspect of life. A similar listing of courses and programs could easily be constructed from most college catalogues.

The central purposes of the schools — which, as John Henry Martin has suggested, are to foster intellectual competence and citizenship in our society irrespective of one's chosen field of work — have been smothered, indeed nearly supplanted by assumptions about the role of the school in society rather than about the role of education in our schools. Our confusion about these matters tends to deprive us of our capacity to make judgments as to the worth of one purpose against another and as to the significance of student performance in one area compared with another.

For reasons that are traceable to demographic changes in the population, the structure and character of family life, the governing structure of our nation's schools, the nature of the work force, the composition of the student body, the patterns of school funding, the contending views of professional educators, and the politics of education, the schools have tended to take the view in recent years that if education is to be had, it is to be had in the schools. Such assumptions, or ambitions if one prefers, are increasingly unrealistic and, in my opinion, will be made obsolete by forces at work within our society that are well beyond the capacity of the schools to control. The education of our citizens will be less and less the monopoly of the

schools in the formal and conventional sense of the term, and their futures will be promising only if what they undertake to claim as their proper and legitimate role is fitted to what they are uniquely able to do well, i.e., to help develop in their students the skills of effective speaking, reading, writing, comprehending, analyzing, reasoning, interpreting, extrapolating, synthesizing, and computing and the evaluation of evidence and proof and to foster the skills of citizenship which will enable students to fix their place and possibilities within the scheme of the larger social structure, to understand the broad sweep of ideas that have shaped the world and animate its economic, political, cultural, religious, and social systems, and to grasp the significance between free and repressive societies.

Institutions of higher education too must critically assess the broad range of programs they offer and the worth of the activities in which they are engaged. The historical growth and development of colleges and universities in this country, and to a great extent in other countries as well, have been characterized by what has come to be called "academic drift," that is, the tendency for an institution to become more like a university than the college that it is. Normal schools and two-year colleges became four-year state colleges and then universities at a very rapid pace following World War II. Many institutions, as a result of student unrest in the 1960s, a recent leveling of enrollments, and increasingly less predictable resources, have been caught mid-stream in their evolutionary development. Such institutions as well as systems of higher education which encompass a variety of such colleges and universities will be obliged to deal with this problem unless they are willing to settle in the long run for institutions that were fueled by expansionist policies and a single model of institutional ambition more than they were by the careful cultivation of rigorous academic practices and educational policies calculated to assure exacting standards of performance by their students.

Implementing Change

My concluding point deals with the conditions that will permit our educational system to enhance its quality. In an era of fiscal constraints and prospective enrollment decline for many areas of the country and types of institutions, does the idea of emphasizing and enhancing quality merit our commitment and our effort to secure the support of others for this goal?

Quality has always carried its own influence and attracted its own

support. As those of us who are intimately involved in building political coalitions supportive of the causes of higher education know all too well, support comes by and large not only from an easily identified and highly disciplined constituency to whose members direct benefits flow; but it also comes from what sometimes appears to be a very delicate coalition of those who believe that quality education does in fact make a difference in the fabric of our society, the lives of individual citizens, the economic viability of of our country, and the security of its sovereignty.

To the extent that we do not establish and sustain publicly respected standards of admission and student performance, we will suffer a diminished regard for what we do among those whose support we simply must have. Moreover, failure clearly to distinguish between performances or achievements at departmental or institutional levels that are excellent as contrasted with those that are mediocre lowers the regard in which a discipline or profession or institution is held.

Not to distinguish excellent from mediocre or failing performance seems to me to have important and long-term consequences for us as individuals, as professionals, and for the institutions we serve. Such failure dulls our incentive to strive and to achieve and goes to the heart of what Berkeley sociologist Martin Trow has called the "private" life of higher education. The private life of education is what actually happens in the classroom, the libraries, the laboratories, and in faculty offices. The "public" life, on the other hand, comprises all the plans, rhetoric, and decisions by administrators, regents, and governmental bodies about the size of the system, its costs, governance, and other general policy matters.

While decisions regarding the public life of education are important and influence the inner workings of schools and colleges in significant ways, the reality and vitality of the notion of excellence is to be found mostly within the fabric of the institution's private life. The broad national studies of the kind undertaken by the National Commission on Excellence in Education can inform us, highlight the problems and opportunities, stimulate thinking, and encourage us to do better, but they cannot determine for a given school or institution how to respond to its particular problems and circumstances. The resolution of such problems will necessarily be accomplished by those most directly involved, i.e., by students, principals, deans, superintendents, college presidents, and mostly, by teachers.

To the extent that we can raise the standard of excellence, promote the striving for it, and provide our faculties the supportive environment they require to achieve it, the private lives of our educational institutions will be invigorated, resulting in enriched educational experiences.

CHAPTER 6

Some Questions About Excellence In Higher Education

Louis Rabineau

In higher education, a number of topics surfaces on almost a cyclical basis — some every five, some every ten, some every twenty years: general education, the role of specialized education, facilities construction and maintenance — to cite just a few examples.

The issue of excellence is no exception. What Professor Broudy of Illinois said about the college preparatory curriculum has some similarities to higher education (indeed, the college preparatory problem usually is one of the issues in postsecondary concerns about excellence):

> Every five years or so, some prestigious commission bemoans the irrationality of subjecting children of the poor (the new under-class) to the college preparatory curriculum when what they really need is schooling for work. The argument sounds sensible, but it fails to cloak sufficiently a family resemblance to the principle of schooling for orphans in early industrial England; namely, that quality folks need schooling in the arts and sciences; the wretched poor need only minimal literacy, piety, social docility and preparation for work. That the public, even the under-class, is not really deceived by this generosity and good sense, is witnessed by the fact that another commission to reform secondary schooling is needed every five years. (Broudy, p.3).

About two decades ago, John W. Gardner raised the question,

Dr. Louis Rabineau is Director, Inservice Education Programs, Education Commission of the States

"excellence — can we be equal and excellent, too?" How much of the following would be changed in 1982 from what Gardner wrote in 1961:

> It is not just technical competence which is needed. A society such as ours is dependent upon many kinds of achievement, many kinds of complex understanding. It requires large numbers of individuals with depth of judgment, perspective and a broad comprehension of the problems facing our world.
>
> And the importance of education in modern society is not limited to the higher orders of talent. A complex society is dependent every hour of every day upon the capacity of its people to read and write, to make complex judgments and to act in the light of fairly extensive information. When there is not this kind of base on which to build, modern social and economic developments are simply impossible. And if that base were to disappear suddenly in any complex society, the whole intricate interlocking mechanism would grind to a halt.
>
> The chief means of carrying on the talent hunt is the educational system. Schools not only educate youngsters — they sort them out. When the need for talent is great — as it is today — this sifting tends to become fairly rigorous (Gardner, pp. 34-35).

Studies and reports dealing with excellence abound today. Some examples include the Middle States Association's listing of standards for accreditation, *"Characteristics of Excellence in Higher Education,"* the New England Board of Higher Education's preliminary report on higher education and the economy of New England, *"A Threat to Excellence,"* and the eminent heart surgeon, Michael Debakey, who spoke of excellence in education when he received his honorary degree at the University of Toledo. One of these reports used the word excellence only once — in its title. The word was never mentioned again in the entire report.

Some assumptions about excellence and then some questions follow:

Assumptions

Assumption 1. Excellence means different things to different people.

Assumption 2. The **attitudes** and **opinions** of those involved

in higher education are at least as important as the objective evidence at hand. Harold Laski, the late British economist, was right. Any teacher who walks into a classroom claiming that he is objective writes himself down as a fool or a sham. The same is true for administrators who walk into an administrative office. The administrator or finance officer who denies his or her own predisposition, prejudice, and attitude in making assessments is not only misrepresenting to the world and to himself or herself but, more importantly, is ignoring an important factor in the work which he or she does in the matter of resource allocation.

Assumption 3. We advance toward perfection, but we never attain it. "To have perfection in our eye is reasonable," said Samuel Johnson. "That we may always advance toward it, even though we know we can never attain it."

Assumption 4. The pursuit of excellence is not just the realm of the academic officer or the general administrator. The finance officer is central in making excellence more readily attainable.

The challenge is to examine our own premises about excellence as we make judgments based on objective information. We support ourselves very well with data collection, data analysis, etc., but in order to maximize our benefits from objective data, we need to examine our predispositions, prejudices, and attitudes.

The following are just a few of the questions that we might ask in that process of examination (didn't Voltaire say, "Judge a man by his questions, rather than by his answers?").

Some Questions

Question 1. **How do finance officers and administrators of higher education differ from their counterparts in business enterprise?** Certainly, there are many ways in which the finance officer and administrator are similar to their colleagues in the work they do and in their outlook. However, is it not true that at least one of the main differences in the work and outlook of those of us who are in this endeavor — higher education — is that we are involved with a process — education — that is, at its best, **not measurable** and **is subjective.** If you think back to what has characterized some of the great teachers whom you and I have known or know today, words spring up that are not quantifiable — the profound teacher, the exciting lecturer, the stimulating

professor, the passionate teacher. In making assessments of the faculty, we cannot always use these words, unfortunately, especially if we rely on the objective measures that we must document in financial reports. We are overlooking a good base. Including reference to the number of profound teachers might be difficult or impossible in a HEGIS or other report. However, we do make assessments as administrators and finance officers in subjective terms of what is going on. You do make allowance, you do recognize, you do respect the faculty members who are exciting, different, and stimulating beyond what the objective measures will indicate in your reports.

Question 2. **Can the price of excellence be too high to pay if other values that we cherish are stifled?** Indeed, some of the values are those that society (more so than the teaching profession and the guilds) might wish to advance, e.g., character, decency, social benefits, personal well being. Burton Clark of UCLA (Working paper No. 1, September 1982, p. 11) painted the issue dramatically:

> It is possible to make the pursuit of excellence into a lethal habit, whether in research on human subjects or the discovery of more ways of mass destruction or the emphasis on grades and credentials that leads to mental breakdown and suicide in young people. High concentration on competence in any one field or institution or system has its costs. Perhaps now most common among the costs observed and heartily disliked by many is a certain lack of democracy. Whenever there are centers of excellence, a few are chosen and the many left out. The exclusion stimulates a counter-argument that there should be a democratization of knowledge: if knowledge is power and it is concentrated, more effort should be made to scatter it. Then, too, the pursuit of self-interest on the part of competent specialist groups may or may not serve the general welfare. "Elite functions" are necessary, but they will always be in tension with mass participation and certain democratic ideals (Clark, p. 11).

Question 3. **Who determines what excellence is?** Does society at large? Does the academic profession, the guild, etc.? Broudy, again, was most illuminating on this: good history, good geography, good science, good literature is what some academic guild has certified by using the criteria of scholarship in a particular discipline. This is the kind of scholarship that college presidents have in mind when they plead for more funds to maintain

"quality." But, good can also mean "good for" something other than scholarship, for example, vocational preparation . . . character, technology, service to industry or agriculture, etc. This is the sort of quality that legislators and boards of education have in mind when they apportion funds (Broudy, p. 6).

The relationship between the two meanings, though fundamental, is not obvious because, as Broudy says, "much good scholarship is not 'good for' anything anybody at the moment happens to want . . . but," he says, "more fundamentally, for knowledge to be **good for** human needs, some poeple have to pursue (it) for its own sake — and that is what college presidents have a hard time explaining to the public" (p. 6).

Question 4. **What constitutes excellence?** Better still, what should you have in mind when you are trying to assess whether a program and institution or state activity is excellent or on the road to excellence? What are presumable benchmarks or criteria for excellence? A tough question. Lord Asa Briggs, Chancellor of the British Open University, mentioned three interesting criteria:

A) What are the ingredients? (The input criterion). If you ask whether a particular meal was excellent, one criterion is what went into the meal? If you want to know if an automobile is excellent, the question is what has gone into it?

B) How does it compare? Again, if you go to a concert and you determine it to be excellent, perhaps you have asked the question of yourself, how did it compare to other concerts you have heard performed either by that orchestra or other orchestras? Note: you do not ask how the concert compares to an art show that you went to. If this is true, then when one asks whether or not a community college is excellent, one should ask not how the community college compares with a university, but, rather, how does the community college compare with other institutions like it or by its past performance? Or, better still, we should determine how closely the institution or program — whether a professional school or a remedial program — comes to **its own** objectives. To repeat: when we compare with other institutions, we should compare like sorts — flagships with flagships, community colleges with community colleges, remedial programs with remedial programs, and so forth, and better still, against the institution's objectives.

C) Will it last? This is the toughest kind of question to answer in assessing an educational program. The paradox is that the programs with immediate payoff (as we have noted above) are the ones that are often construed as high quality or excellent, while the types of activity or programs that "will last and have a long-range effect" may not be viewed as excellent because their impact is not immediate or dramatic.

Question 5. **Is excellence something only the "big" or prestigious university in the state can achieve?** I informally asked a number of legislators what institution or program in their state came closest to achieving excellence. The response was, more often than not, a flagship institution. Hardly anyone named a state college or community college or remedial program. Now it is possible that the flagship institution came closer to achieving its **objectives.** But the reality is that if one measures excellence in terms of what the **mission and objectives** of the institution are, more institutions in the state also will be perceived as closer to excellence than they are pictured today.

Question 6. **Is excellence identified primarily on the basis of input (which is easier to measure), or are the characteristics of excellence more identifiable by the outputs?** The late Steve Bailey once indicated that he had been keeping track of the number of times the terms **input** and **output** were used in meetings. He noticed that, on any given topic, there was always much more talk about input that about output, even though one might assume that there should be some relationship between input and output. His conclusion was that out there there should be a lot of extra "puts' floating around.

Question 7. **Is the pursuit of excellence a technique for excluding minorities and other disadvantaged from entrance into the higher education community?** We all know that the presence of minorities has increased significantly in higher education in the last few years. But that increase has not been manifest across the board in all types of institutions. Indeed, minority enrollments have increased the most in two-year institutions, specifically, the community colleges.

The New York Times, in a front page story (November 28, 1982), noted a drop in first-year enrollment by about 12 percent in fall, 1982, at the 42 historically black colleges; at Harvard, first-year minority students dropped by 7 percent; at Cornell and the

University of Arkansas, the drop was 10 percent.

While some of this drop was attributed to the economy and attitudes on the Potomac about financing postsecondary education (or maybe that should read **not** financing), a number of administrators seemed to concur with the explanation of President Warch of the University of Kansas, "The ideological energy of the 1960's is not there any more . . . colleges are not as abashed by the elitism charge as they were 15 years ago."

Question 8. **In a practical sense, how are criteria translated to higher education for excellence?** The Middle States Association's report on "Characteristics of Excellence in Higher Education," probably not too unlike those of other accrediting associations, emphasizes an approach to excellence that is qualitative rather than quantitative. While they admittedly have no formulas for application, etc., they do list a dozen categories that you could guess would be prevalent. **Please note the order** — A) Institutional Integrity; B) Missions, Goals and Objectives; C) Program and Curriculum; D) Outcomes; E) Admissions; F) Student Services; G) The Faculty; H) Organization and Administration; I) The Governing Board; J) Planning, Budgeting and Accounting; K) Library Learning Resources; L) Other Resources; M) Plans and Equipment; N) Innovation and Experimentation; and O) Publications.

You have probably noted that they put their first priority for excellence on the identity and integrity of the institution. They indicate,

> An important index of an institution's quality is the integrity with which it deals with its constituencies in the public. This aspect of integrity is reflected in the honesty, openness and concern for its constituents that an institution reveals in the establishment, conduct and evaluation of its academic and other programs (M.S.A., p. 4).

They go on to say that

> A college or institution must be managed well and remain solvent, but it is not a business industry. It must be concerned with the needs of its community, state and country, but a college or university is not a political institution. It must be morally responsible, but even when church-related, it is not a religion or a church.

What is the upshot of all this? These are but some of the questions. How does one answer these questions? The answers to these questions are very personal. The thesis of these remarks is that one must own up to the relative values and importance of the values of the assessor — that is **you.** In making the judgments on budgets, the answers are yours **and** your institution's or agency's, and the judgments reflect your negotiated attitudes.

The missions, goals, and objectives of the institution or the agency must be clarified and continually reviewed. The extent to which excellence will be achieved is the extent to which, in the first instance, the missions, goals, and objectives are clarified so that the administrators know exactly what their goal is.

You must come up with your own stance on these and other questions for your own institutions and agencies, based on their value systems, goals and objectives, **but** "fessin' up to your own."

What are the answers? How you work out the specifics is, indeed, what this whole conference is about.

If there were but one (and there are many) overarching point to make about excellence, my vote would be split between two statements of John Gardner. The first

> Though we must make enormous concessions to individual differences in aptitude, we may properly expect that every form of education be such as to stretch the individual to the utmost of his potentialities . . . we must recognize that there may be excellence or shoddiness in every line of human endeavor. We must learn to honor excellence (indeed to **demand** it) in every socially accepted human activity, however humble the activity, and to scorn shoddiness, however exalted the activity (Gardner, p. 86).

The second statement is the classic statement:

> An excellent plumber is infinitely more admirable than an incompetent philosopher. The society which scorns excellence in plumbing because plumbing is a humble activity and tolerates shoddiness in philosophy because it is an exalted activity will have neither good plumbing nor good philosophy. Neither its pipes nor its theories will hold water.

It's tough to top that.

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PART IV

HIGHER EDUCATION IN MEXICO: PLANNING CHALLENGES AND PERSPECTIVES

CHAPTER 7

The National System for Higher Education Planning

Arturo Velazquez Jiminez

In the name of the Mexican National Coordinating Council for the Planning of Higher Education (CONPES), I would like to thank the organizers of this conference for their invitation to talk about our National Higher Education Planning System.

First, an overview of the structure of Mexico's educational system and, specifically, its higher education sub-system.

The Mexican system consists of three levels: basic, intermediate, and higher education. Institutions on any of these levels may be public or private. However, it is important to point out that the legal framework for the educational system is provided by the Mexican Constitution of 1917, which establishes that the federal, state, and municipal governments are to share the responsibility for education. In a way the system is much more centralized than in the United States. Most financing is, for example, federal. Yet the Mexican universities are in most regards more autonomous than in the United States.

Dr. Arturo Velazquez Jiminez is Coordinator of Academic Programs, National Association of Universities, Mexico.

Basic education is the responsibility of primary and secondary schools. In broad terms, this educational level consists of six years of primary school and three years of secondary school. Although most secondary programs are designed to lead to further education, some are aimed at providing students with the basic technical knowledge that they need to enter the labor market.

Intermediate education is usually referred to as "bachillerato" or preparatory studies and is designed to prepare students for undergraduate programs in institutions of higher education. Preparatory programs consist of six semesters. The plans of study include a common core of courses and require students to specialize in a particular academic area; this concentration determines, to a certain extent, the undergraduate fields of study that a student may enter. There are six basic areas of concentration: fine arts, economic and administrative sciences, physical and mathematical sciences, chemical and biological sciences, social sciences, and the humanities.

Major Characteristics of Higher Education in Mexico

This level of education is provided by 80 universities, 118 technological institutes, and 117 colleges, centers and schools. These 315 institutions (53 percent of which are private and 57 percent public) have a total enrollment of approximately 840,000 students. Some 87 percent of the student population attend public institutions and 13 percent private. It is important to point out that 29 percent of these students are enrolled in institutions located in the metropolitan area of Mexico City and 71 percent in institutions in other areas of the country. We also find that 91 institutions are located within the Mexico City metropolitan area, and 224 institutions are unevenly distributed throughout other regions of the country.

A brief analysis of the different options for undergraduate study offered by higher education institutions in Mexico shows that there are approximately 390 different programs. These programs are distributed as follows: 52 are related to agricultural sciences; 20 to natural and pure sciences; 21 to health sciences; 94 to economic and administrative sciences; 50 to education and the humanities; and, finally, 152 are related to engineering and technology.

In postgraduate studies, 112 institutions offer these programs. There are 97 Ph.D. programs, 430 Master's degree programs, and 192 postgraduate specialization programs. Only about 3 or 4 percent of our students are in graduate studies. There are approximately 69,000 teachers working for higher education institutions.

Problems in Higher Education

But what kind of issues or problems are currently being faced by the Mexican institutions of higher education? On the quantitative side, it suffices to say that 40 years ago Mexico had a population of 20 million people and only some 20,000 students of higher education. Today, with a population of approximately 68 million, there are more than 840,000 students. The National Population Council has estimated that within 20 years, by the year 2000, if the population continues to grow at a rate of 3.2 percent, Mexico will have more than 130 million people, 60 percent of whom will be urban and 40 percent rural. These figures illustrate the magnitude of the problem that the country's higher education system faces. The problem can be reduced if the government's policy of a 1 percent population growth rate can be achieved for the year 2000, but even that would not change the outlook very much, since the population would still reach 100 million.

On the qualitative side, the problem of the quality of teaching, research and cultural diffusion activities are far from being solved. The work of the universities is being affected by the excessive pressure that they face: first, from the growing social demand for access to university-level studies; second, from the limitation of financial resources provided by the government; third, from the shortage of academic personnel, in terms of both quantity and quality; and fourth, from the wide gap that exists between the academic work done by the universities and the speed of the changes generated by the world-wide scientific-technological revolution.

To find rational, coordinated solutions, the creation of the National Association of Universities and Institutions of Higher Education (ANUIES) was proposed in 1950. Among this organization's principal objectives are to coordinate the higher education institutions both among themselves and with the federal and state educational authorities, as well as to study academic and administrative problems of the national system of higher education in Mexico, aiming at its integral planning within the national educational system. At its assembly in 1968, in Jalapa, it agreed on the creation of the National Center for Higher Education Planning. This Center prepared the "Preliminary Diagnosis of Higher Education," and as an immediate result of this project, in 1971, the National Program for the Formation of Professors was created and represents the first planned effort at a national level to improve teaching in institutions of higher learning.

At the assembly in Queretaro, in 1975, the previous agreements and resolutions of the ANUIES were incorporated as a body of doctrine and operational mechanisms. These inter-institutional and shared achievements act as the foundation for the reform of higher education and provide the background and conditions for the integral planning process at a national level. Of all these resolutions, those referring to the study of student demand at a college preparatory and higher education levels, the implementation of diagnostic planning methods for each institution, the creation of national programs for the improvement of educational functions, and the preparation of a model of higher education growth and reform should be pointed out. In addition, some of the incorporated institutions have been formulating their development plans through their own planning groups.

Higher education has been and is the object of study and planning by federal and state educational authorities, as well as other public and private organizations. Here, it should also be mentioned that in 1965 the Ministry of Public Education established the National Commission for Integral Educational Planning, in which participate, among others, teachers, researchers, and technicians of the Ministry of Public Education and diverse higher education institutions.

At the ANUIES assembly held in Puebla in 1978, basic policy was established in the area of institutional, state, regional, and national planning to incorporate the National System for Permanent Higher Education Planning and the basic structure of the National Higher Education Plan.

Finally, at the ANUIES assembly held in Morelia in 1981, general guidelines for the decade of 1981-1991 were established for the National Higher Education Plan.

The Organization of the Higher Education Planning Process

The process of higher education is carried out in six broad programmatic areas. These programmatic areas are

a) normative,
b) organization and coordination,
c) development,
d) budget and financing,
e) operation of the substantive area, and
f) evaluation and follow-up.

a) By means of the activities included in the normative area, there is an attempt to define and establish the legal foundations, both federal and state, of higher education. b) The organization and coordination area includes establishment of planning units as elements of the national higher education planning system, to closely relate inter-institutional activities of a state, regional, and national nature. c) The development area is to establish the conceptual and informative infrastructure required for the creation of programs to make the institutions function according to anticipated goals. d) The activities of the budget and financing area are aimed at calculating the economic resources necessary for the execution of development plans and programs of the national higher education system. e) The activities in the operation of the substantive area consist of programs aimed at developing human resources with professional capacity, carrying out research, spreading knowledge and the arts, forming and strengthening a dynamic and creative tradition. f) Finally, the evaluation and follow-up area consists of programmed activities aimed at evaluating the progress of the plans and programs of the national higher education system.

Characteristics of the National System for Planning

There is an attempt to establish true communication between the higher education system and economic and social projects prepared by the government. ANUIES participates not only in the creation of such projects but also in their orientation, definitions, and policies.

The higher education planning process is conducted through a coordination network whose principal elements are

1. Institutional planning units,
2. State commissions,
3. Regional councils, and
4. The National Coordinating Council for Higher Education Planning.

At the institutional level, the system will depend on the planning units of each higher education organization. Focus is on alternatives to orient decision making in such aspects as paying attention to demand, rationalizing the allocation of resources by the institutions, evaluating the educational process, and closely relating state, regional, and national programs.

At the state level, the focus is on coordinated interaction between institutional and state programs and meeting high-priority demands.

This interaction occurs through the operation of the state coordinating councils for higher education planning, formed by the educational institutions and the representatives appointed by the respective local government.

Regional coordination can aid in developing research and minimizing, among other things, the effects of centralization and the duplication of educational services. In this way, the coordination of regional activity programs remains in the hands of the regional councils, with the institutions retaining the freedom to establish relations with the other local, state, or federal sectors that are deemed appropriate.

Another type of coordination is conducted by the special technical committees established through the initiative of the educational institutions or by invitation of the National Coordinating Council for Higher Education Planning. The national planning programs are created by the National Coordinating Council for Higher Education Planning. Participating in this council are the representatives of the federal government and the ANUIES National Council. Thus, all agreements are carried out, respectively, under the auspices of the Ministry of Public Education and the General Executive Secretary of the ANUIES.

Among the functions of the National Coordinating Council are the generation of agreements related to the proposal, diffusion, and evaluation of general policies for higher education; the relation of institutional planning to national development; the constant evaluation of the development of higher education plans and programs through regional meetings and other procedures; the support of institutional, state, and regional programs; the promotion of program congruency within the national context; and the function of acting as a consulting body for institutional and regional needs.

Characteristics of the National Higher Education Plan

The National Higher Education Plan contains a series of activities that aim at regulating the short- and long-range development of the institutions of higher education. It consists, basically, of a minimal series of programs that can be applied at an institutional, state, or national level and which can be modified or broadened to include additional aspects of teaching, research, and cultural diffusion, as well as university planning and administration.

The primary objective of the operation of the diverse programs of the Plan is for the national higher education system to be able to contribute to the economic, social, cultural, scientific, and technological progress of the country through academic development, the most efficient utilization of resources, and the relation of its programs to national problems.

The various programs of the Plan serve only as a point of departure to permit the educational institutions and technical planning groups within state, regional, and national bodies to define specific projects and activities.

In brief, the current activities of the institutions of higher education and the proposed programs constitute only the first version of the National Higher Education Plan which, in the process of permanent planning, will be modified and perfected.

CHAPTER 8

The National University of Mexico

Jose Narro
Alfredo L. Fernandez

In Mexico the fiscal situation is worse than in the United States; prices increase faster, unemployment grows more rapidly, real salaries decrease, government social welfare decreases, and education expenses remain almost the same (under a 100 percent rate of inflation in 1982). The National University of Mexico faces a totally different situation than in the past, confronting new problems and at the same time, the "forever-old" ones.

The National University was opened in 1910. Since then, its four functions have been established: teaching, research, cultural extension and management. In 1929 the institution became autonomous. From 1970 to 1981, the preparatory enrollment increased from 15,000 to 40,000 students (13 percent of the national student population at this level). The university bachelors education represents more than the

Dr. Jose Narro is General Director for Planning, the National University of Mexico. Dr. Alfredo L. Fernandez is Subdirector for Planning.

17 percent of the total national enrollment of higher education, and the graduate enrollment represents 86 percent.

The university has had to increase its administrative employees in the period 1970-1981 from 9,000 to more than 23,000. The budget also increased, from 666.8 million pesos in 1970 to 17,395.5 million pesos in 1981.

The actual administration is trying, through the process of planning, to organize the institution in order to become responsive to new needs; to expand and to enlarge the services it gives; to achieve what it is necessary to systematize and plan every single activity. At this stage one has to point out that planning itself is not considered a goal but a means of adapting the institution to its inherent changes and to those of the environment.

The Emergence of Planning

In 1953 a planning commission was established to study the growth of school population. This commission made an analysis of the structure of higher education and the labor market and set up the basis for the planning of higher education in Mexico. In 1967 a technical commission for planning was created; it developed a study to establish the basis for the institutional planning in the years from 1969 to 1981. All of these isolated efforts came to a point where they had to be unified and systematized in all the offices and schools of the institution. Therefore, in 1974 the commission came to be the present General Office of Planning.

In 1967 the program budgeting approach was introduced to administer and rationalize resources, even though it was not until 1969 that such an approach began to operate. At that point the financial resources available were allocated by the program budgeting process. Since then, the program has become an instrument of financial policies that tries to reflect the institutional objectives and goals as well as the fundamental process of seeking more resources from the general government.

The process can be described as follows: first, each branch establishes its goals according to the general policies of the university; second, the needed resources are analyzed, and together with the General Secretary of Administration and the General Office of Program Budgeting, the particular programs are evaluated and

resources allocated. Subsequently, the project is discussed with the University Foundation for its approval, and then it is submitted to the Budgeting Commission of the University Council for its approval. The process is repeated each year.

All activities of the institutions are included in the budget. The essential programs are surveyed and brought up to date, and the less important ones are amended. Apart from being flexible, this budget system establishes different stages of importance of each program. The programming done in the university accordingly follows the growth and development of the institution. The growth is determined by enrollments, by new research projects, and by cultural activities.

The Challenge of the Eighties

The problems that the university confronts in the 80s are many.

Social Demand and the Quality of Education. Although the population growth rates tend to decrease (fact given by the Mexican government), the demand for higher education in the 80s is increasing because the potential students of higher education are already included in the educational system. The educational process will suffer from overpopulation. The classrooms, laboratories, and libraries may be too crowded, and this situation may very well affect the quality of education.

In the last decade the students from college preparatory schools insisted on being accepted in bachelor learning, and there is no evidence that this tendency will be modified in the 80s.

According to the "Ley Organica," the UNAM should be concerned basically with national problems and cannot ignore the two situations already mentioned. The challenge is to obtain excellent educational quality in spite of the great demand.

Innovation and Linkage with the Labor Market. The progress of scientific research and the "Technological Revolution" in the second half of this century have acted negatively upon the contents and methods of higher education. Many things are obsolete by the time they are taught and used. It is presumed that a bachelor's student from natural science is approximately ten years behind the technology used in the labor market.

In the countries of the Third World, including Mexico, this backwardness is even more evident, depending upon the technological dependence which the country has on overseas companies. The small and medium enterprises can hardly develop their own technology, hence they must buy foreign technology. In the 80s, it is unlikely that the small national enterprises will eliminate technological dependence, even though the managers are aware of the need to develop a Mexican technology to meet the social and economical requirements of the nation. So far, the university is the national institution where the development of technological research is possible, desirable, and necessary. This social responsibility of the university reveals an urgent "formative innovation" which transforms the educational contents so that the graduates will be able to adapt themselves and their knowledge to the labor market.

The Graduate Studies in the Eighties. While the number of graduates has increased considerably in the last ten years, there is a lack of design and clear theoretical ideas in the elaboration of the postgraduate studies; therefore any subject may originate a Master's degree or Ph.D. There are a great number of courses with insufficient enrollment. On the other hand, there is a strong need in graduate studies for the education of researchers conscious of the national problems and with the ability to solve them.

In the 80s, the UNAM should control the creation of graduate plans and programs and rearrange its present characteristics of this level. In this decade the UNAM should define, independently and without pressure from minority groups, the graduate courses that the country requires.

Teaching and Research Faculty. In the 80s the university will have to face the challenge of consolidating its faculty in the areas of research and teaching. Although the university is in a privileged position in relation to other educational institutions in Mexico, since it has a great number of full-time and half-time faculty, it finds itself now in the complex situation of preserving it. This implies also that the institution has to restore the academic staff losses which occur for natural reasons, such as deaths, emigrations, changes of job, etc. Seventy percent of the staff have the highest academic level that can be obtained in the institution.

Research as a Resource of National Development. It is of vital importance to develop certain research which would originate

technologies in accordance with the national needs because in a world in which knowledge and its consequences grow rapidly, the gap between the developed countries and the underdeveloped ones widens.

The university has developed a considerable amount of the research. It has taken an effort of decades to build the infrastructure needed for this development. Many of the scientific and humanistic areas where research is done in our institution have a firm basis for undertaking greater efforts for solution of national problems.

Our university has started to define new strategies to link itself to its society. An example of this is the so-called "University research programs" which intend to coordinate activities among different centers and institutes in the institution.

Assessment of Research. It has been difficult to assess the results of research. This is mainly due to the problem of defining the goals contemplated in each project and to visualizing requirements it involves. There is also an absence of parameters to establish comparisons.

Another difficulty is to qualify the benefits of a research program. Most of the efforts in the field of research assessment consist of the elaboration of formulas to measure the productivity of a research center using variables like number of articles published, number of pages produced, etc.

The challenge for the 80s consists of finding social indicators to evaluate research and, in that sense, validate the achievement of university programs.

Financing Alternatives. One of the priority challenges is to find financing alternatives. For this the university has to enlarge its services and give special attention to the development of those that can be profitable. This is the case with the UNAM's supply system of publications. This system could monopolize the selling of textbooks which is now mainly done by private bookstores. It could also start a general program of book sales of different publishing houses at attractive prices.

The university also has to establish a program of institutional priorities to deal with those areas that can be deeply affected by the economic crisis.

Administrative Efficiency. In the last decade the university has seen an increase of its administrative staff and growth of a complex organization. In 1973, the administrative sector had more than 10,230 employees and 149 administrative offices. In 1980 there were 23,716 employees and 158 offices. In 1982 the number of offices grew to 187. Among these offices there are no important efforts to coordinate activities, to share resources, or to unify working criteria. The automation and dispersion of administrative procedures hinder each of the parts in obtaining a complete view of the institution. On the other hand, the central administrative offices concentrate information in an isolated way. These facts could lead the university to a critical stage from the administrative point of view. This crisis will have to be faced with drastic organizational and administrative modifications.

The Development of an Information System. At present the university lacks an adequate information system to detect problems and provide the elements needed to plan its development. The establishment of an adequate system is not an easy task due to political and administrative problems. To achieve it, the following should be taken into consideration:

1. The general information system of the National University of Mexico should integrate all other information subsystems.

2. The characteristics and purpose of information needed must be clearly defined by university regulations.

3. University offices should be made responsible for the creation and transmission of information.

4. The use of information should be allowed to those offices different from the ones that originate it.

The Planning Process. For three decades the university has done some planning work. However, planning has not yet been institutionalized; the academic staff does not use planning as an instrument to organize everyday activities. Planning is done in an isolated and casual way by some university offices. And the central management office does planning work to solve specific problems.

The planning of the university as a general activity is a challenge for the 80s. A model should be used for the annual program of activities of the university. It should integrate all functions and be closely related to programming and budgeting activities.

The University and National Development. The National University of Mexico has played an important role in cultural and scientific development of the country. Now it has to face the challenge of relating its activities to other institutions through a permanent planning system of higher education. The goal would be to harmonize efforts in those programs of national interest (such as the search for a technological, scientific, and cultural self development).

The National University is the headquarters of the Regional Council for Higher Education Planning for the metropolitan area of Mexico City. The challenge for the UNAM in the 80s will be to obtain real participation of all higher education institutions' members of the council to help solve the regional problems related to the metropolitan area of Mexico City and at the same time to obtain the participation of all national higher education institutions in dealing with questions of national dimension.

CHAPTER 9

Planning at the State Level

Ernesto Bolanos

Higher education planning is a recent undertaking in Mexico. One could fairly say that the major impetus for higher education planning was given in 1978 at the XVIII reunion of the General Assembly of ANUIES (The National Association of Higher Education Institutions). It was there that a national plan for higher education was designed. This presentation, however, concerns statewide planning efforts in the state of Nuevo Leon — the industrial center of Mexico.

Nine universities of varying sizes and missions comprise the higher education system of Nuevo Leon. The rapid growth of higher education enrollment in Nuevo Leon, coupled with an open admissions policy, has called for new approaches to institutional planning in order to (1) obtain better inter-institutional coordination and (2) meet the demands created by increasing enrollments. Thus, a state plan for higher education was seen as necessary.

Dr. Ernesto Bolanos is Coordinator, State Commission for the Planning of Higher Education in Nuevo Leon, Mexico.

Translated by Martin M. Ahumada.

NCHEMS

The development of higher education in Mexico is directed by a national coordination body (CONPES), regional organizations (CORPES), state commissions and institutional planning groups (UIP). A state commission for higher education planning was formed in each state in order to a) foster inter-institutional coordination and b) support the national plan for higher education through a variety of state planning efforts. The planning commission for the state of Nuevo Leon (COEPES) was established in 1980 and is comprised of a) rectors from the nine institutions of higher education in the State, b) state and federal representatives from the Public Secretary of Education (SEP), c) the National Foundation for Science and Technology, and d) other organizations that were in some way related to higher education.

Methodological Aspects of Statewide Planning

It is important to note that in Mexico, where higher education planning is a relatively new endeavor, the application of complex planning techniques is hampered by an inadequate infrastructure and a mentality not oriented toward planning. However, much progress has been made in this area.

As an instrument that seeks uniform planning among the institutions of the state, and with the national plan, CONPES — a national coordination body — proposes that state planning efforts achieve the following:

1. expound the role of higher education within the legal framework of the state and as stated in the educational philosophy and policies of the institutions;
2. define those general objectives of higher education that coincide with the mission of higher education in the state;
3. set policy and provide guidelines for higher education in the state, particularly with regard to the five major development areas of higher education:
    a) involvement in the larger society,
    b) the classification of higher education institutions,
    c) improving the quality of education,
    d) managing institutional growth, and
    e) improving the functionability of higher education.
4. appraise the state's actual and anticipated (ten years) socio-economic development, focusing on the effects that such development will have on higher education;

5. anticipate higher education trends in the state for the succeeding five years, focusing on the five development areas (listed above) which provide a guide for the state plan;

6. formulate a plan for addressing the problem areas expounded in the appraisal and projections, a plan indicating the objectives, goals, follow-up procedures, and, finally, a description of the projects involved in the plan;

7. create programs related to the three major functions of higher education, including the function of supporting educational planning; and

8. delineate each institution's responsibility in fullfilling the objectives of the state plan.

The planning framework for the state of Neuvo Leon emphasized that the participation of all the state's higher education institutions was necessary in order for the plan to succeed. The technical team responsible for seeing this plan through was composed of university representatives who were involved in the mechanics of the plan. The major components of the state plan for higher education development in Nuevo Leon consist of

1. a general appraisal of higher education in the state,
2. a study of the major problem areas in the state,
3. a profile of the state's socioeconomic milieu,
4. a study of the state's educational system,
5. a statistical profile of higher education in the state, and
6. the development of general guidelines for state development.

A General Appraisal of Higher Education in the State of Neuvo Leon

The planning office of the state university was chiefly responsible for this appraisal, having received limited support from representatives from the other institutions of higher education in the State. The data required for the appraisal were obtained through a questionnaire that, after being approved by the evaluation team, was administered to all institutions of higher education in the State. The questionnaire was designed to obtain information on

1. institutional organization: legal framework, objectives, goals, and academic structure;

2. instruction-learning function: curriculum, academic evaluation techniques, number of professors, number of students;

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3. academic support services: classrooms, libraries, laboratories, computer center, etc.;

4. research: research organization, research projects that had been completed or that were active, types of researchers, physical resources, etc.;

5. student services: by type, human and other resources;

6. professional development opportunities: for faculty and staff;

7. information systems: human resources, strategies for staff development, present and future need assessments;

8. cultural extension: types of activities, human and other resources;

9. social services: legal framework, enrollments, service programs, relationship to other functions;

10. administration: human resources involved, etc.;

11. financial organization: income and expenditure sources; and

12. institutional planning units: characteristics, functions, organization, etc.

As recommended by the evaluation team of CONPES, a coordinating committee for the appraisal determined what data were to be derived through the questionnaire, taking into account that data limitations would exist in each institution. This information provided a general view of the status of higher education in Nuevo Leon, particularly as related to the major problems and characteristics of this higher education system. The outcomes of the appraisal permitted the evaluation team to identify the following problem areas that required a thorough examination:

1. the characteristics and career/educational goals of college-bound students;

2. the employment outlook for higher education graduates in the technical and professional trades, including those students with graduate-level credentials;

3. the professional development needs of university personnel;

4. the expected and actual accomplishments in scientific research;

5. the overall status of social services;

6. the status of graduate education;

7. the degree of curricular uniformity; and

8. statistical data and budgeting issues.

An Analysis of the Problem Areas

1. **The Demand for Preparatory and Higher Education in Nuevo Leon**

   a) How students selected from a variety of study areas and types of institutions; b) factors associated with students attrition rates; c) the percentage of students employed during their study program; and d) the student's socioeconomic background and its effect on his/her selection of study areas.

2. **The Demand for Technicians and Professionals in Nuevo Leon**

   By addressing a questionnaire to employers in the industrial sector of the state, it was possible to obtain a) knowledge of the actual manpower needs of the industrial sector (needs that are to be met by the higher education sector), b) a profile of higher education graduates employed by the industrial sector, and c) a three-year projection of manpower needs in the industrial sector.

3. **Professional Development**

   In a questionnaire submitted to presidents, deans, department heads, and curriculum specialists, information was sought regarding a) the number of full-time versus part-time faculty; b) the criteria used in evaluating faculty performance; c) the structuring of academic work loads for faculty; and d) inter-institutional workshops geared at faculty development. With this information it was possible to address the following professional development issues: a) criteria for hiring, b) employment requirements, and c) opportunities for career development and advancement.

4. **Research**

An effort was made to assess research endeavors in the higher education system of Nuevo Leon, focusing on a) the research methodology utilized, b) the availability of human and other resources required to do research, c) the areas in which research should be undertaken, d) the relationship between the research function and the instruction function of higher education, e) the role of research in the larger society, f) the organization of research activity, and g) the programs designed to provide research skills.

The State's Socioeconomic Milieu

This section was concerned with obtaining the following three profiles:

1. a demographic profile,
2. an economic profile, and,
3. a sociocultural profile.

The first profile was formed by examining the actual and projected demographic trends in the state. The second profile was derived by examining the cost-of-living index and industrial production and employment statistics. The third profile was derived by looking at the effects of urbanization and the provision of educational services. This urbanization issue has important implications for Nuevo Leon because many jobseekers are attracted to Nuevo Leon's flourishing industry, and these individuals will work for a while and will then seek to move up the social ladder via a professional education. A technical preparation, the shorter-run alternative, has not been a popular alternative. This condition has led to a saturated unemployed "professional" market and an unmet need for technical manpower.

The State's Educational System

This section examined the characteristics of primary and secondary education in the state and the inputs that these make on the higher education sector.

Actual and Projected Enrollment Trends

Enrollment projections were made by examining the characteristics of each student cohort in the state. This study of cohorts gave special attention to student migration patterns and private versus public enrollments.

The Development of General Guidelines

As noted herein, the guidelines, policies, and activities of the state plan were formulated by the technical group of COEPES and released for review by the evaluation team and the rectors of the universities involved. Moreover, an interrelationship was sought between the state plan and its national counterpart. The guidelines of the state plan, recommended in a general form, were to be compatible with the objectives of each institution.

Major Findings

Higher education enrollments in Nuevo Leon will double by the year 1991; 53 percent of this will be due to demographic growth and 47 percent to the immigration of students. Professional program enrollments will increase due to the following factors: a) a greater access to higher education for lower income groups, b) an increase in the number of students graduating from primary and secondary schools, c) a substantial increase in the popularity of various career alternatives, and d) an increase in the manpower demand/needs of the industrial sector.

A larger number of females and lower-income groups will participate in certain study fields, particularly those leading to administration-related careers. The private sector's share of total enrollments is expected to increase at a steady rate.

It was determined that the overall curricular structure of higher education in Nuevo Leon is not geared to meeting the needs of society. In addition, this curricular structure continues to operate in a very traditional form, upholding the popularity of out-dated study plans.

With regard to faculty and staff development, much emphasis was placed on the promotion of scholarly endeavors and academic quality. Such efforts, it was believed, would eliminate or reduce faculty attrition and would provide a platform from which to implement approaches for academic evaluation.

With regard to graduate education, it was found that the different study programs proposed had not been clearly delineated and would therefore require further study.

Concerning research activity, it was shown that very little research had been carried forth because a) it had been initially promoted by individuals and not by organized groups, b) a framework

for research was lacking, c) most of it was of an applied nature, d) it was only tangentially related to instruction, e) most researchers were over-burdened with administrative responsibilities and were therefore unable to dedicate full time to research, and f) research has received very limited financial support.

CHAPTER 10

Developing a Public University

Gustavo Molina Freaner

On the verge of achieving a higher degree of socioeconomic development, Mexico has embarked on a series of political, economic, and social strategies that will permit the country to optimize its human and other resources. These resources, it is believed, should be targeted at developing the major production areas of the country that have been classified by the federal government:

Agriculture and Forestry
Fishing
Industry
Education and Cultural Preservation
Health and Welfare
Tourism
Communication and Transportation
Commerce
Labor Unions
Government Administration and Military Defense

Any planning strategies and procedures designed to foster both employment and industrial development in Mexico must be tied into these production areas.

Within this context of national development, the public university in Mexico must adopt a planning strategy that coincides with the national goals to support the major production areas. Specifically, the

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Dr. Gustavo Molina Freaner is Director of Work and Social Services, State of Sonora, Mexico.

Translated by Martin M. Ahumada

higher education sector must be more directly involved with these production areas in order to make the appropriate adjustments in its three major functions of manpower training, research, and extension.

The planning phases discussed herein provide a general outline for describing the steps for developing a university. It is important to note that implicit in this general outline are numerous planning concepts and issues that were previously supported and endorsed by the University of Sonora. Here are the phases:

1. **An analysis of the socioeconomic milieu.** This first phase of the planning process seeks to obtain the following objectives:

   a) to highlight the major socioeconomic issues that affect or influence the state; that is, to identify, characterize, and understand the key issues regarding the state's growth and development or lack thereof. Indeed, to meet this first objective the state's educational, economic, and social infrastructure must be examined thoroughly and

   b) to classify and expound the state and national programs that involve higher education and that are pertinent to state and national development.

2. **The actual status of services provided in the state related to (a) manpower training at higher education levels, (b) research, and (c) extension activities.** One of the main objectives of this planning phase is to undertake a true evaluation of the state's higher education system, particularly as related to the three major functions (noted above) of the university sector. In addition, other noneducational institutions will need to be looked at in order to determine the total state effort in manpower training, research, and extension. It is important to point out that the state appraisal or evaluation undertaken in this planning phase must be tied into the socioeconomic development "needs" expounded in the previous planning phase. For the most part, it is not as necessary to carry forth a detailed and exhaustive appraisal as it is to address the key issues involved in the formulation of a "development strategy" that incorporates the three development functions discussed earlier.

3. **Socioeconomic areas whose actual and anticipated**

status place present and future demands on the higher education system of the state. This phase implies that a supply-and-demand balance will be sought between (1) what the state and the country will require in order to achieve socioeconomic development and (2) the services that will be provided through the instruction, research, and extension functions. The outcome of this balance will serve to identify the areas requiring further investment from the higher education community.

At the height of this third phase it will become evident that the planning process must proceed or evolve within the state's social context in order to be congruent with a conceptual framework for the planning process. Moreover, it is not possible to separate from the end-product of the three planning phases the programs, projects, and activities that the university can implement to meet the major development needs or demands of the state. This is the case for the following reasons:

a) the university must begin by determining (1) what type of organizational structure and (2) what human and other resources it will need in order to satisfy the demands of the regional development plan;

b) the university must assess the adequacy of its instruction, research, extension, and support functions, in light of the goals and legal framework the university is beholden to;

c) finally, the university must examine its internal problems in relation to its input (students, material resources, etc.); its academic, administrative, social, and physical structure; and its production function.

Having carried forth the above steps, the university would have addressed the three major "dimensions" of its development plan: (1) the contextual dimension, (2) the interfunctional dimension, and (3) the intrasystematic dimension, all of which should be included in the institutional appraisal or evaluation.

The goals of the university and its legal framework. The university's goals embody the major foundation upon which institutional activities are developed and given direction.

They are axiomatic and generic, representing the university's role in society. Their enunciation provides a useful guide for defining institutional objectives and objectives and policies associated with development. On the other hand, a legal structure, which consists of regulatory obligations imposed by the federal government and the legal system of the university, provides a useful guide to viewing or encapsulating the entire planning process.

5. **Institutional appraisal process.** In planning the development of the university an institutional appraisal or evaluation is necessary to obtain a thorough understanding of the evolution of "university" organizations, in light of the vital currents and issues which provided for the founding of the larger society or social milieu. The general objectives of this evaluation process are
   a) to identify the conditions, characteristics, and problems of the university, when viewed within the overall context of state development,
   b) to measure the progress made by the university with regard to its three functions — instruction, research, and extension; including the administrative support functions such as those that examine the effectiveness and the interrelationships between the three functions, and
   c) to serve as a necessary antecedent for defining the objectives, goals, and policies associated with institutional development.
6. **Procedure for defining institutional objectives, goals, and policies.** This procedure purports to express in explicit form those objectives, goals, and policies that are to serve as institutional guides and reference when
   a) developing new programs and projects designed to improve technical, professional, and graduate education;
   b) undertaking new research programs and projects in the sciences and in the humanities;
   c) developing new programs and projects designed to improve university extension activities; and
   d) developing new programs designed to improve academic and administrative support services that are directly related to the three previous programs.

7. **The programming process: core area.** The process is chiefly concerned with the development of those programs and activities that, in light of the objectives, goals, and policies that have been defined heretofore, are directed at improving the three basic functions of the university: instruction, research, and extension.

8. **The programming process: support area.** This part of the planning process is concerned with dictating the support programs — legal, financial, administrative, and plant-related — that will be needed in order to carry forth the **core area** programs.

9. **The appraisal and follow-up process.** This process is concerned with (a) observing the concrete course of action that has followed throughout the entire planning process for developing the university and (b) appraising the actual outcomes of this development plan. Such procedures will make it possible to measure the rate of progress in meeting the university's planning and development objectives and, therefore, to make any necessary modifications and corrections in the execution of programs and activities.

CHAPTER 11

Instructional Costs at a Mexican University

Martin Miguel Ahumada

Introduction

In their quest for a higher education system that can satisfy the country's needs, Mexico's higher education administrators search for tools that will enable them to manage their operations effectively and efficiently. In this, these administrators have begun to realize the potential value of cost analysis as developed in the United States. To date, the tool of cost analysis has not been fully understood and much less implemented in Mexican higher education. Even in the United States, the use of costing for internal management purposes is in

Mr. Ahumada is a Ph.D. Candidate in Higher Education at the Center for the Study of Higher Education, University of Arizona, Tucson, Arizona.

many respects in its adolescence. However, the United States has witnessed a dramatic increase in the demand for analytically derived cost information to be used in the management of higher education.

In this study, U.S. costing methods were applied to a particular Mexican university: the Universidad Privada de Mexico (UPDM). Located in a major industrial center of Mexico, this private university enrolls approximately 2,000 students and offers bachelor's, master's, and professional degrees in numerous fields. In addition to a college-preparatory school, there are seven colleges and twenty-one departments offering instructional services at UPDM. Students from the upper socioeconomic class are attracted to this elite and prestigious university.

Background

The primary purpose of this study is to compare direct instructional costs among UPDM's colleges and to discern plausible reasons for variations in these costs. The cost data for this study were derived using the NACUBO[1] classification of budgets and accounts and the NCHEMS[2] Data Elements Dictionary.

As shown in Table 1, three measures of direct instructional costs were derived for the seven colleges: cost per student credit hour ($SCH), cost per full-time student equivalent ($FTSE), and cost per course ($CRSE). In addition, these cost measures were rank ordered from 1 to 7, beginning with the lowest costs. This study begins with a review of the three cost measures. Next, and focusing on the cost per FTSE, visual examination of explanatory variables is conducted, followed by correlation and regression.

Review of Cost Variations

A close examination of the figures in Table 1 show that, when all three unit cost measures are taken into account, the College of Education has the highest unit costs, followed by the College of Art. The College of Humanities has the lowest unit costs; the College of Law has the second lowest. The College of Natural Sciences, the College of Business, and the College of Medicine (exclusive of the cost per CRSE) all have unit cost measures that approximate the respective university means. It is important to note, however, that together these three colleges enroll 57.12 percent of all the FTSEs in the university and incur 57.12 percent of the total direct instructional costs. Their moderate unit costs being close to the university means is explained apparently by economies of scale.

[1] National Association for College and University Business Officers
[2] National Center for Higher Education Management Systems

Art and Medicine show atypical variations in rankings across the three unit cost measures. Art has the highest cost per FTSE ($587.22), the second highest cost per SCH ($21.94), but only the fourth highest cost per CRSE ($1142.48). Showing a reversed pattern, Medicine has only the fourth highest cost per SCH ($16.82) and per FTSE ($453.92) although it has the highest cost per CRSE ($2255.07). This course cost is twice that of the university mean ($1206.21). Possible explanations for the lack of uniformity in such cost rankings can be obtained by examining the data in Table 2, which includes a list of variables influencing direct instructional costs. For instance, the FTSEs and SCHs ratios between Medicine and Art are about 2:1 (see Total Volume of Instruction columns). However, Medicine has a 65 percent larger instructional budget than Art. That these resources are distributed over twice as many SCHs and FTSEs could explain why Medicine has lower cost per SCH and cost per FTSE rankings. On the other hand, Medicine offers only 78 percent as many courses as does Art. That Medicine distributes 65 percent more instructional resources over 22 percent fewer courses would explain its higher cost per CRSE ranking.

As shown in Table 1, direct instructional costs per FTSE range from a low of $334.91 in Humanities to a high of $587.73 in Art. Visual examination of the variables in Table 2 shows that Art has the lowest Average Class Size (10.8), the lowest Student-Faculty Ratio (4.8:1), and the second highest Average Salary for Part-time Faculty ($1414.17). These three variables represent the general conditions that typically would yield a high cost per FTSE. Humanities, on the other hand, had only the third largest Number of FTE Faculty (57.7) but the largest volume of instruction as represented by the Total Number of FTSEs (520.8), Total Number of Classes (191), and Total Number of Courses (132). It appears, then, that Humanities obtain a somewhat higher level of faculty productivity.

Other differences between Art and Humanities are worthy of note. Compared with Humanities, Art has a larger Average Faculty Credit Load and somewhat more FTE faculty. However, since Humanities has approximately double the total volume of instruction, a lower cost per FTSE could be expected.

Direct instructional costs per FTSE were second lowest in Business ($350.53) and second highest in Education ($545.46). Table 2 shows that Business had the highest Student Faculty Ratio (11.3:1) and the lowest Average FTSE Credit Load (21.00). Education, for its part, had the smallest Average Class Size (14.5). The volume of

TABLE 1

UPDM Rank-Ordered Direct Instructional Costs per SCH, per FTSE, and per Course, for all Colleges, Fall 1981

COLLEGES	DIRECT INSTRUCTIONAL COSTS					
	$/SCH	Rank	$/FTSE	Rank	$/COURSE	Rank
Art	21.94	6	587.83	7	1142.48	4
Business	16.69	3	350.53	2	1019.55	3
Education	25.49	7	545.46	6	1533.13	6
Humanities	15.30	2	334.91	1	913.22	1
Law	12.71	1	377.50	3	992.51	2
Medicine	16.82	4	453.92	4	2255.07	7
Natural Sciences	18.55	5	461.54	5	1265.21	5
Tot. Univ.	17.32	-	431.63	-	1206.21	-

instruction also differs substantially between the two colleges. As shown in Table 2, the total volume of instruction in Business (9,040 SCHs, 430.7 FTSEs, and 148 classes) is easily more than three times the volume of instruction in Education (2,466 SCHs, 115.24 FTSEs, and 41 classes). This difference takes on added meaning when noting that the number of FTE faculty in Business (38.1) is less than two and a half times the number of FTE faculty in Education (15.7). Thus, it appears that the relative faculty productivity in Business is much greater than in Education and might very well account for the much lower cost per FTSE.

The College of Law had the third lowest cost per FTSE ($377.50). This cost is considerably lower than the university mean ($431.63). As shown in Table 2, Law had the second highest Student-Faculty Ratio (10.1:1) and the second largest Average Class Size (20.7). Moreover, the average FTE Faculty Salary in Law ($3791.12) was not significantly greater than the university average ($3332.51). Given this combination of factors, a relatively low cost per FTSE in Law could be expected.

The analysis so far has been only cursory; it has served only to make readily apparent observations about factors associated with cost variations. For the remainder of the study the approach taken will be statistical, with the main objective being to assess in systematic terms the relative importance of the nineteen independent variables (Table 2) associated with instructional costs.

Regression Analysis

As shown through the inter-correlation matrix in Table 3, the following nine variables correlated highly with cost per FTSE: Credits per Class (.85), Student-Faculty Ratio (−.77), Number of Weekly SCHs (−.76), Number of FTSEs (−.60), Number of Weekly Classes (−.58), Total Number of SCHs (−.53), Average Class Size (−.52), Total Number of courses (−.51), and Total Number of Classes (−.50). Before these variables were entered into a reduced form regression model, careful attention was given to the level of colinearity among the variables. The objective here was to select the variables whose explanatory power — in accounting for cost variations among the colleges — was not shared importantly with other variables in the model.

TABLE 2

Variables Influencing the Direct Costs of Instruction for all Colleges, Fall, 1981

Colleges	No. Professors			Avg Prof Credit Load	Avg Faculty Salary			Student Faculty Ratio	Avg FTSE Credit Load	Avg No. Cred's per Class	Avg Class Size	Avg Volume of Weekly Instruction by FTE Faculty					Total Volume of Instruction				% of SCH Production by FTE Faculty & Aca. Lev.		
	PT	FT	FTE		PT	FT	FTE					No. SCHs	No. CLAs	Hrs. Theor.	Hrs. Pract.	Hrs. Docen.	No. SCHs	No. FTSEs	No. Clas.	No. Cred.	Lower	Upper	Grad.
Art	16	14	40.0	16.10	1414.17	4360.89	2789.09	4.8 : 1	26.97	5.2	10.8	128.1	2.5	13.2	1.8	2.7	5122	190.07	98	60	97.46	2.54	0
Business	74	12	38.1	12.70	758.86	8289.28	1960.45	11.3 : 1	21.00	3.1	19.9	247.6	3.9	12.6	0	6.2	9040	430.47	148	81	76.17	14.67	9.16
Education	8	11	15.7	10.70	511.09	5342.71	4003.73	7.4 : 1	21.13	4.0	14.4	157.5	2.6	8.4	9	6.8	2466	115.24	41	32	82.73	9.90	8.27
Humanities	45	31	57.7	11.80	760.62	4448.90	3022.98	7.9 : 1	21.46	3.3	19.0	197.6	3.3	10.3	9	6.4	11398	520.82	191	142	99.01	.97	0
Law	10	6	17.0	15.00	864.44	6095.37	3791.12	10.1 : 1	28.80	3.9	20.7	298.5	4.8	14.1	0	5.3	5155	173.74	88	50	66.01	31.95	2.04
Medicine	65	12	59.4	7.80	1826.85	4386.86	2890.14	6.4 : 1	27.38	4.3	20.3	173.1	1.3	3.2	8.9	1.2	10262	377.57	76	52	50.74	49.26	0
Natural Sciences	61	30	62.2	14.90	785.84	6078.46	3701.88	8.0 : 1	24.52	4.1	16.4	199.6	2.9	10.2	2.5	8.9	12415	499.10	182	119	100.00		0
Univ. Totals	332	116	290.3	—	—	—	—	—	—	—	—	—	—	—	—	—	53858	2307.01	802	526	—	—	—
Univ. Means	46	16.6	41.5	12.20	1066.03	5379.64	3332.31	8.0 : 1	24.00	3.8	18.5	192.4	2.8	9.7	2.8	5.3	7979.71	329.57	114.6	75.1	82.76	15.29	2.04

Table 3 shows the intercorrelations among the nine most important independent variables. As can be noted, there is a multicolinearity problem among some of these nine variables. The Student-Faculty Ratio has a low correlation with five other variables: Average Class Size (.249), Total Number of SCHs (.123), Total Number of FTSEs (.222), Total Number of Classes (.206), and Total Number of Courses (.147). Of these five, however, only Average Class Size and Total Number of Courses are not themselves highly intercorrelated. Thus, the problem of intercorrelation is largely solved by entering only the three variables (Student-Faculty Ratio, Average Class Size, and Total Number of Courses) into the reduced form regression equation. Since this study did not concern prediction, no purpose would have been served by combining any of the variables into an index.

Table 4 shows the estimated regression coefficients of the three variables in the model. Included are each variable's Beta coefficient, t-value, t-significance, R^2 value, change in R^2, and F-significance. Having resolved the problem of intercorrelation, it is now possible to obtain reliable regression coefficients — ones which account for most of the explained variance in costs per FTSE. An examination of the regression coefficients in Table 4 can be quite useful in interpreting actual "dollar" changes in the variables. Controlling for other factors, it can be estimated that a change of one student in the Student-Faculty Ratio is associated with a $26.92 difference among the colleges in direct instructional costs per FTSE. This is to say that, on average, for each one student increase in the student-faculty ratio, costs decline by $26.92 per student. Similarly, and again holding all other factors constant, a one course reduction in the Total Number of Courses taught by the colleges is associated with a $1.14 cost increase in per FTSE expenditure. No doubt this is because resources are spread across fewer courses, and scale economies are sacrificed somewhat. Finally, a one unit increase in the Average Class Size is associated with a cost reduction of $6.63 per FTSE, again controlling for other factors.

All three variables demonstrated a fairly high level of significance. The regression coefficient of Student-Faculty Ratio (.05) was significant at the 95 percent confidence level. The other two variables, Total Number of Courses and Average Class Size, were .10 and .13, respectively.

A close examination of the Beta coefficients (standardized partial regression coefficients) in Table 4 indicates that the Student-

TABLE 3

Inter-Correlation Matrix for Variables Associated With the Direct Costs of Instruction at the College Level

	Student-Faculty Ratio	Average Class Size	Credits per Course	No. Weekly SCHs	No. Weekly Classes	No. Total SCHs	No. Total FTSEs	No. Total Classes	No. Total Courses
1. S-F Ratio	------								
2. Avg. Class Size	.249	------							
3. Credits per Course	−.818	−.405	------						
4. No. Weekly SCHs	.860	.360	−.606	------					
5. No. Weekly Classes	.786	−.302	−.537	.670	------				
6. No. Total SCHs	.123	.431	−.358	.103	−.048	------			
7. No. Total FTSEs	.222	.341	−.490	.103	.090	.970	------		
8. No. Total Classes	.206	−.077	−.373	.081	.349	.825	.896	------	
9. To. Total Courses	.147	.055	−.373	.090	.309	.823	.879	.978	------

Faculty Ratio is the most important variable affecting direct instructional costs. The second most important variable is the Total Number of Courses, followed somewhat closely by the Average Class Size. It can be seen, however, that the relative importance of each is not terribly different.

As can be noted in Table 4, the three-variable regression model obtained the very respectable R^2 value of .897. This means that the three-variable model accounts for about 90 percent of the variation in direct instructional costs per FTSE among the seven colleges. Of the three variables, the Student-Faculty Ratio appears to have the greatest influence on instructional costs; that is, it explains 59 percent of the total variance in the costs. The Average Class Size provides an additional 16 percent of the total explained variance, and another 15 percent is provided by the Total Number of Courses.

Conclusions

The findings in this study are generally in accord with the literature on cost analysis in U.S. higher education. As evidenced from the correlation and regression analyses done here, the student-faculty ratio, the average class size, and the total number of courses (a measure of curricular breadth), were among the major factors creating differences in instructional costs among UPDM's colleges. Similar findings were reported in the California and Western Conference Cost and Statistical Study — a landmark study in U.S. costing methods applied to higher education.

The finding that the student-faculty ratio was the variable with the most effect on instructional costs is in accord with the McLaughlin et al. (1979) study of 1,347 vastly diverse colleges and universities. That the relative curriculum breadth (implied in the Total Number of Courses variable) was a major cause of instructional cost differences is in accord with the McLaughlin et al. study and the more recent Leslie and Brinkman (1980) study of instructional costs among eight Western Research Universities I[1]. Based on these findings, one is led to believe that the production function[2] of both UPDM and U.S. institutions is sufficiently similar to make feasible the application of U.S. costing methods, as done herein.

[1] Carnegie Commission Classification System

[2] For an interpretation of the production function in U.S. higher Education, see Leslie and Brinkman (1980).

TABLE 4

Regression Model for Variables Associated With the Direct Costs of Instruction at the College Level

	B	Beta	t	R^2	Changes in R^2	F Significance
1. Student-Faculty Ratio	−26.92	−.605	−3.11 (.05)*	.591	.591	.04
2. Total Number of Courses	−1.14	−.441	−2.34 (.10)*	.749	.159	.063
3. Average Class Size	−6.63	−.398	−2.07 (.13)*	.897	.147	.055

* t-significance values.

It was a primary goal of this study to show the potential value of U.S. costing procedures at UPDM and, perhaps, other Latin American universities which are seeking to increase efficiency and to professionalize the management of their operations. Internal costing studies such as this one may be used to justify a reduction of resources in units experiencing enrollment declines and the reallocation of those resources to growth sectors. Indeed, most higher education institutions in Mexico will require cost information and analysis as they move toward the solution of problems and the laying of plans.

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PART V

NACUBO SESSION FOR COMMUNITY COLLEGES

CHAPTER 12

Focus on Quality

Joyce S. Tsunoda

In a recent issue of the *Educational Record*, Arthur Levine of the Carnegie Foundation for the Advancement of Teaching said,

> Quality: where you sit determines where you stand. When we in academe talk about quality, each and every one of us brings a lot of baggage, some of it excess, to the discussion. We come with our experiences, our firmly-held beliefs, our needs, myths, and strong feelings, all of which guide us and blind us.

Thus what I am about to share with you is just that: my experiences, my firmly-held beliefs, my needs, myths, and some strong feelings I have developed which have guided me and, admittedly, blinded me as well.

Kapiolani Community College, which I have headed since 1976, is a campus of some 5,600 students. All together the six community colleges in Hawaii, which are part of the University of Hawaii, enroll a total of 22,000 students in our regular credit programs. This is slightly

Dr. Joyce S. Tsunoda is Provost, Kapiolani Community College, and Assistant Vice-President for Academic Affairs, University of Hawaii.

more than 50 percent of the combined total enrollment of the entire ten-campus University of Hawaii. Additionally, we enroll nearly 10,000 special students each semester. We employ about 700 full-time and 400 part-time faculty. Our operating budget for 1982-83 was approximately 20 percent of the total general funds appropriated for the University of Hawaii System ($209.5 million). Yes, in Hawaii the community college system has come into its own, at least as far as size is concerned. But what about quality?

The discussions here last year, particularly those in terms of the community colleges, were quite thought-provoking. The study by Breneman and Nelson on "Financing Community Colleges" had some of us aroused. Also Richardson's presentation on "Financing Community College Missions in an Era of Scarce Resources" certainly gave me as a practicing administrator in the community colleges something very substantial to chew on. He reminded us that

- community college has been an almost perfect example of Drucker's service organization where importance is measured by size, and success means achieving a larger budget than the previous year.

- (there is) the changing public attitude toward academic standards and access. . . . In the decade of the eighties, the priorities of public policy are shifting from access to achievement.

- the issues of the eighties are likely to center on institutional integrity and quality rather than institutional diversity and quantity.

Having grown up with the community colleges in Hawaii, I cannot help but agree with these statements. Certainly, size alone is not a measure of quality.

Measure of Quality

But, have we grown as we have because of our quality instruction? I have often felt a tinge of discomfort when I hear ourselves as community college staff making statements about our transfer programs being equivalent to or better than those offered at a four-year institution's lower-division programs. Back home, it is very tempting to make this type of comparison with Manoa Campus (University of

Hawaii's main four-year component). After all, students tell us that they like our smaller classes and teaching-oriented faculty. Our enrollment has not declined, and students still flock to our opened doors. The University of Hawaii System's Institutional Research studies show that our community college transfers to Manoa do just as well academically as those who started at the four-year campus as freshmen. Are these all not measures of quality?

I find myself answering my own question with a qualified "yes." We are doing the job that we have been charged by our State Legislature to do, and we have done it well. We are approaching quality in our instructional programs, both in vocational and liberal arts components, but we are doing so within the context of our special mission as part of the total public higher educational system in Hawaii. Our mission makes us different from Manoa and the other campuses of the University of Hawaii. Our open-door policy brings to us students of widely different abilities, interests, and educational objectives. To teach this heterogeneous student body requires faculty with special abilities and commitments to teaching and learning. Every opportunity that I have I ask these faculty to keep in mind our mission as a community college. I ask them not to forget that our liberal arts program has two-fold objectives: (1) As general education support for our vocational students, for many of whom our courses may be the only "liberal arts learning" that they may ever have the opportunity to receive and (2) as a "transfer" program but focused on career exploration. We are not a Manoa Campus or a University of Arizona, and we should not try to be. Quality, I firmly believe, comes from recognizing and accepting our boundaries and our roles.

Is there any relationship between the tuition of an institution and its quality? The University of Hawaii is currently considering a proposal to raise tuition substantially throughout the entire system, the first such move in nearly a decade. If the proposal currently under review goes into effect, the tuition at the community colleges could increase from the current $40 per semester, which approximates 4 percent of the cost of instruction, to $145 per semester or 15 percent of the cost. This increase will be phased in over a four-year period. Interestingly enough, responses from the community college faculty and students to this proposed increase have not been negative. On the contrary, many faculty and even students commented that if the students had to pay more for their community college education, they might take their education more seriously. There would be less tendency for capricious drop-outs and no-shows, and students themselves say that they may study harder if they know that their

education cost them a lot more than what they are directly paying now. Thus it appears, rightly or wrongly, that students may be thinking of "quality" as related to the price they pay for educational services. There seems to be a tendency to equate "less expensive" with "less quality." I maintain, however, human nature notwithstanding, money alone does not guarantee quality.

The Matter of Public Image

Turning to another aspect of this issue of quality, I raise another question: "Is there a correlation between public image and quality?" If, indeed, public recognition and kudos were valid measures of quality, then Hawaii's community colleges have a corner market on quality:

> Hawaii's community colleges are potentially the most exciting segment of our public education system. They epitomize the egalitarian spirit of the nation, with an open-door admission policy, low-tuition fees, and convenient locations. They offer considerable remedial work. The colleges reflect the concept of expanding educational opportunity for all citizens.

This statement was made by Mr. George Chaplin, Editor-in-Chief of *The Honolulu Advertiser*, Honolulu's morning daily, to the faculty of Kapiolani Community College in January, 1981.

"Community Colleges Get High Marks" read a headline to an article in the November 22, 1982 issue of the evening daily, *The Honolulu Star-Bulletin*. In this interview, Dr. Dale Tillery, Professor Emeritus of Education at the University of California, Berkeley, praised Hawaii's community colleges for our "commitment to planning and planning that ties in with other agencies and services."

What Dale Tillery and George Chaplin found are indeed there. We have on each campus a serious commitment to planning and critical self-evaluation. Regularly scheduled program reviews are conducted by each community college for all of its degree programs. At Kapiolani Community College, we additionally initiated a two-year cycle of programmatic and fiscal planning tied into the biennial budget cycle of the State. We began this project under the federally funded Advanced Institutional Development Program and with technical assistance from the National Center for Higher Education

Management Systems. The rewarding aspect of this project was that we were able to establish a formal campus-wide planning process, complete with planning manuals applicable to the departmental level. Significant administrative and faculty development occurred as part of this project. Any project of this nature would not be sustained without the commitment and sense of ownership by the faculty of the institution. I sense that we have this institutional commitment at Kapiolani Community College.

Therefore, if quality is partly equated with a continuing process of self-examination and commitment to careful planning for effective program development and resource allocation, I feel that we in Hawaii have at least a good start in the right direction.

The Role of Outcomes

Quality is also often measured in terms of outcomes. Review of recent literature indicates that this has become an increasingly popular approach to assessing the quality of an institution. The difficulty, however, with this approach is to define "outcomes" of higher education and for those involved to come to some common agreement as to the various measures of effectiveness. At Kapiolani Community College, we have tried to focus on those outcome measures which directly reflect the students' experiences and perceptions, their progression and persistence, and their satisfaction levels with various aspects of their college experiences. We have tried to gather information about these student characteristics through a multi-year project called the "Student Flow Program" through which we are following some 2,000 students who entered Kapiolani Community College in Fall 1979 and to analyze the data regarding their characteristics (sex, entry age, marital status, high-school background, educational objective, enrollment status, etc.) and follow their progression for at least six semesters. A three-year student flow study of Fall 1975 entering students had also been conducted by the Office of the Chancellor for Community Colleges, and Kapiolani Community College had been included in this study. Thus we have baseline data on student progression and persistence and are able to compare the two groups of students.

As the result of analyzing the student flow data, recommendations were formulated, and the departments are being urged to consider these recommendations in our program's budget planning effort. The results of this Student Flow Program are also being used on a college-wide basis to do a comprehensive evaluation of our efforts

to improve instruction as well as institutional and academic support provided to our students. While the study itself is still underway, the results obtained thus far have given us useful insights into our students, their educational needs, and what is happening to them at Kapiolani Community College. If there is anything that I have learned from these Student Flow studies, it was that we need to continually take a more student-oriented approach to assessing what we do and how well we are doing our job.

I am somewhat satisfied that our system of community colleges in Hawaii has at least taken the right steps toward planting and cultivating that elusive factor called "quality" within our institutions. Having reached that self-serving conclusion, I also hasten to caution myself that our challenge is just beginning. We fared well when there were resources available for growth. We are now entering the period of making do with what we already have or with even less. Hawaii's community colleges have been generally well supported by the State Legislature. We will undoubtedly continue to receive the support of the Legislature and the community. However, the inevitability of sharing the burden of decreasing State revenues has finally come for Hawaii's community colleges. Many of our major sugar and pineapple industries are either closing down or cutting back in their operations. Recently, the Island of Molokai, which is entirely dependent on the pineapple industry, was notified that the plantation on that island community will be closing down its operations effective the end of 1982. The impact of this kind of economic storm will be severely felt statewide, even more severely than the damages caused by Hurricane Iwa.

Reduced Financial Support

As a direct impact of the State's fiscal situation, the University of Hawaii has been told recently to prepare for what may be its severest spending reductions. This came in the form of ceilings placed on the budgets of all departments of the State government, including the University of Hawaii, for the biennium of 1983-85. As a result, the President of the University assigned to each campus unit its "share" of the reductions with directives to address the reductions on a programmatic basis and to "make selective modifications in order to create a leaner, strong State University." What is apparent to each of us as we attempt to comply with this directive is that this is for real.

What does this mean for the community colleges? Very simply put, we need to become more selective, not necessarily in terms of the students we enroll but in terms of what we do with and for these students. Access can no longer mean that we do all things for all people. Our efforts must be focused not only on access but on achievement and on retention. We need to learn to say "no" when necessary and appropriate. Academically, we can no longer afford to coddle our students with practices such as non-punitive grading. We need to keep reminding ourselves as educators that students need to assume a greater responsibility for learning. We need to instill this sense of responsibility in our students. I believe that we can be firm with our students without destroying that which has become an American tradition of providing access to educational opportunities for those who seek it.

Quality, no doubt, is whatever people think it is. The bottom line, for those in the community colleges, is that for our special brand of higher education, quality comes not from growth but from the selective emphasis on those activities which best fulfill our respective institutional missions.

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CHAPTER 13

The Changing Mission of the Community College

William E. Berry

Most leaders in the community college movement concur on the fact that the mission of their institutions will change, perhaps dramatically, in the early 80s. Occurrences in our society, principally economic in nature, are forcing governing boards, managers, and faculty to suspect that they are witnesses to the passing of the "good ole days" of increasing enrollments and ample resources. But what will these changes be? Can they be managed so as to avoid debilitating or mortal wounds?

Few would argue that these institutions, which in the 60s and 70s increased in numbers at the rate of one per week, became the wonder — the miracle — of higher education. As they blossomed into "the people's colleges," there seemed to be few constraints on their growth. Yes, we were the darlings of the education world in those days, but the romance which waxed so hot with legislators and taxpayers has begun to wane.

You are perhaps familiar with the study conducted by Richard Richardson of Arizona State University. This study identified all services provided by community colleges in Arizona and combined them into six function-based mission statements and six clientele-based mission statements. These twelve items were then submitted to seven groups which were asked to respond to two questions on a five point scale from "1" (strong opposition) to "5" (strong support).

Question one: How important is the mission statement? And question two: Should it be supported by tax monies? The study is ingenious in its simplicity. Its twelve mission components are those most of us would check off without hesitation, for they epitomize the popular conception of the open-door/comprehensive community college. There is little revealed in terms of new directions for the mission of these institutions, and I believe that its authors would agree that this was not the purpose of the study. It does capture, however,

Dr. William E. Berry is President of Phoenix College.

two types of information which would be of great use to boards and administrators in making needed adjustments to their changing environment.

Importance of the Twelve Functions

One of these "relevations" is just how the several "publics" view the importance of each of these twelve functions.

First, there was found to exist a broad consensus on the importance of these functions, with a couple of interesting exceptions. On the three highest ranked mission statements, there was strong agreement among the seven publics. Those were 1) providing courses and programs leading to the associate in arts degree; 2) providing courses and programs in occupational/technical training; and 3) a bit of a surprise perhaps, providing programs for high-ability students. Two of these are function-related, and one is clientele-related; and it is interesting to note that two groups — faculty and legislators — often with divergent interests, have common views of at least these three important mission concepts. From the fourth ranked to the twelfth ranked, there are increasing differences among those groups on their views of the mission statements, but practically all express a sense of positive support for providing, in this order, basic skills, student activities, programs for some high-school students, services for handicapped, general interest courses, admission for nonhigh-school graduates, services for minority students, use of college facilities by community, and finally, admission for nonresidents — the last one with so little positive support as to raise some questions.

There are one or two interesting, and perhaps important, points to be made here. 1) On every mission except one, administrators ranked them more important than did any other group, and that can perhaps be viewed as a measure of the fervor and commitment that they bring to their positions of leadership. The exception was that of serving nonresidents, on which the state board ranked it higher than did administrators, but both rated it rather important. This mission, incidentally, is the only one given a rating of "some opposition" and that by members of the legislature.

Another point of interest is the high ranking (4) of the mission statement "provide programs in basic skills" (incidentally this was ranked lowest by legislators and highest by local board members, with the average rank just below that of providing programs for high ability students). Those two missions certainly impose some extremely

difficult programs for managers and instructional problems for faculty. The enigma here, though, is that the mission statement "providing special services for minority groups" was ranked uniformly low (10) in importance by all groups. This seems to fly in the face of the national policy (perhaps this relates to the fact that most of these programs are supported with federal monies as opposed to state or local monies) and **seems** to be contradictory to the high ranking of basic skills, recognizing that minority students are most likely those needing basic skills programs.

Now there really is not any news here that would cause midcourse corrections in emphasis of mission. On the contrary, it can easily be viewed as a basic validation of the mission pursued by most of these institutions over the past twenty years. So what is new? One has to look beyond this part of the study to that in which those same groups responded to the question "should these functions be supported by tax dollars?"

The three mission statements which ranked highest in importance — degree programs, occupational/technical training, and programs for high-ability students — received high ranking for tax dollar support from all groups. The fourth highest, basic skills, received support from all but the registered voter group. From there, however, the support deteriorates for the missions of programs for high-school students, nonhigh-school graduates, student activities, and support services for minority groups. For the last three mission statements, no group is in favor of supporting them with tax dollars.

There are three important questions which are not asked by this study, all of which bear dramatically on the subject of the changing mission — principally because they were not asked.

1. Are there missions which should be added to the agenda (e.g., international education, volunteer training, tech transfer)?

2. Of those missions, which should be supported by tax monies? To what extent?

3. And most important, how do the community colleges fit in with the increasing number of postsecondary education providers?

Longitudinal California Study

Now let me turn briefly to the second study. This study was

funded with federal funds through the California State Chancellor's office and conducted by Steve Sheldon. Unlike Richardson's work, Sheldon's is a longitudinal study which selected some 6,500 first-time students in eleven California community colleges and followed their progress for four years — 1978 through 1982. Much of the data collected in this excellent work, which I think will become a landmark study, clearly refute some negative and damaging "conclusions" by Kissler in his 1980 study, and Breneman, and Wilms, and Dorothy Noll, and others, on issues of the transfer function, the occupational/technical function, and several others. I will draw out only some findings that relate to "mission."

First, some interesting prototyping of students in the three mission categories of transfer, occupational, and special interest programs. Most of us have been increasingly uncomfortable when questions arise such as What is a transfer student?, How many transfer to a four-year college?, What is an occupational student?, How many of them get jobs? — and other similar questions. Sheldon identified eighteen separate and distinct prototypes, seven in the transfer category: (1) Full-time transfer; (2) part-time transfer; (3) undisciplined transfer — poorly motivated and/or unqualified in academic skills; (4) technical transfer; (5) athlete transfer; (6) financial-aid seeker; (7) the expediter — main affiliation with 4-year school but finds it more convenient to take some courses at a community college. In the occupational/technical category (1) Program completer; (2) job seeker; (3) job up-grader; (4) career changer; (5) license maintainer. In the special interest category (1) leisure skills student; (2) education seeker — personification of life-long learning; (3) the culture seeker; (4) explorer/experimenter — women returning to college; (5) basic skills student; (6) lateral transfer.

I made the point earlier that the mission of the community college is often determined by factors outside the college. The open-door policy has allowed students to determine in large part the purpose that the institution serves, a reality often little understood and occasionally not accepted by governing boards, legislators, faculty, and administrators. That unwillingness — perhaps a more generous term is unawareness — has prevented community college leaders from knowing and understanding what is necessary in order to begin adjusting the mission(s) of their institutions to meet the mandates being made on them by today's economic conditions and changing clientele.

What most of us are beginning to understand — but have not

acted on our awareness — is that open doors — comprehensiveness — must now have parameters. We can probably no longer be all things to all people. In his epic work, *Financing Community Colleges*, Breneman lays out both optimistic and pessimistic scenarios for our future, the latter of which sounds more like our current plight than simply one of several scenarios.

- No growth in adult education because of saturation of demand and unwillingness of governments to provide subsidies;
- Shrinking enrollments in occupational/technical programs because of failure to maintain currency in equipment and instruction and increased competition from the private sector;
- Growing resistance to remedial education;
- Loss of the transfer student because of four-year colleges' aggressive recruitment;
- Erosion of cost advantages due to decrease of support with tax monies;
- Absence of political clout in state legislatures;
- Slow economic growth and a shrinking public purse to be distributed among increasing number of claimants — health care, prisons, highways, and other public works.

Again, it is tempting to cite economic problems and their solutions, but I will resist and summarize my remarks by observing that all evidence points to the community college mission undergoing major changes. Can the leaders make use of studies such as those cited here to develop a clearer understanding of how the past and present can be used to prepare for the future? Can we begin setting priorities among the multiple missions we are now attempting to support and defend? Can we differentiate between those eighteen clientele groups identified by Sheldon and develop various methods of programming for and financing them, depending upon community importance, ability of the student to pay, and other yet-to-be-identified criteria? Can we plan a major role in addressing the current problems in our society, or will we become part of the problem?

Can we be visionaries, as we once were, and adapt our colleges to

play a role in the "mega trends" of the future as suggested in the John Naisbitt Report in which he identifies ten major trends:

— National to global economy;

— Industrial to information society;

— Centralized to decentralized society;

— Representative democracy to participatory democracy;

— Technological to high tech;

— Hierarchal to distributed networks;

— Institutional help to self-reliance;

— North to South population move;

— Conquering nature to cooperating with nature;

— Either/or to multiple options.

The extent to which we as leaders can answer "yes" to these questions will determine whether missions of our institutions will be established by us or whether they will be set by agents outside the college — the legislators, the taxpayers, and yes, the students, to whom we were unable to respond to their signals for help.

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PART VI

NACUBO SESSION FOR FOUR-YEAR COLLEGES AND UNIVERSITIES

CHAPTER 14

Financing Quality in a Period of Austerity

John Folger

Quality has multiple meanings in higher education. Most of these concepts of quality are imprecise, despite the amount of discussion about the topic. Three meanings of quality are most frequently used and are most important to the discussion (Astin, 1982, identifies five approaches to measuring quality, including the idea that it is unmeasurable. See also Webster 1981 for a discussion of different meanings of quality).

First, the public and legislators think of quality primarily as what the student learns; economists call this the **"Value-Added"** concept of quality. The "best" college is the one which provides the best learning environment and has students with the greatest gains in knowledge and skills.

Second, the faculty definition of quality is based on the maintenance of high standards and the advancement of knowledge. Those institutions whose faculty are productive in research, who set high standards of performance, and who select students who can meet the standards have the best reputations. The **"prestige"** definition in the university sector is based primarily on the research accomplish-

Dr. John Folger is Co-Director, Education Policy Center, Institute for Public Policy Studies, Vanderbilt University.

ments of the faculty, while in the community college sector it is based on community service and serving a broad constituency. In the liberal arts colleges the emphasis is on the success of students in getting into selective graduate and professional schools.

Third, administrators think of quality in terms of **resources,** skilled faculty, smart students, buildings, libraries, and equipment. Dollars per student is a convenient proxy for the resources, and in much of traditional thinking about quality, the affluence of the institution gets equated with its quality.

Critics can point out that added expenditures do not necessarily produce added learning, but supporters can show that there is a substantial correlation between dollars per student and institutional reputation (Cartter, 1966). Critics also point out that it is very difficult to relate resources to amount of student learning. Correlations have been low, and comparative data on value added difficult to obtain. Resources as a proxy for quality is the easiest definition to measure, while the value added is the hardest (Astin 1982).

No institution wants to project an image of "low quality" or "declining in quality," and therefore precise definition and measurement of quality is threatening to institutions in the "bottom half" or which have had "declines" in quality; it will set in motion a downward spiral of recruits and reputation which can be very difficult to turn around. As they compete for students, many institutions will have a strong incentive not to be very precise about quality.

What is Happening to Quality?

The evidence suggests that the qualifications of college entrants has declined slightly in the last twenty years. Test scores have declined, there have been some declines in the knowledge and skills of 17-year-olds on the National Assessment of Educational Progress, and a larger fraction of the less able high-school graduates are continuing on to college.

If the average entrant is at a lower point, there is more room for student improvement; the "value added" measure of quality should show bigger gains **if** graduation standards are being maintained. There is, however, no comprehensive evidence on this score.

The method of making reputational ratings produces relative scores. These scores do not indicate overall changes in quality.

Ratings have considerable stability because most departmental or school reputations are based on the reputation of the faculty at the university, which changes slowly. Ratings made at five-year intervals are highly correlated.

Resources as measure of quality have been declining in a majority of institutions in the past three years. This is because increases in revenues for higher education have not kept pace with inflation. Over the 1970 to 1980 decade, resources about kept pace with inflation and enrollment increases nationwide (Minter and Bowen, 1982). Overall averages do not adequately convey the impact of changes in the availability of resources on the teaching-learning process, so the evidence is basically inconclusive.

How Have States Financed Quality in Higher Education?

The way resources are allocated in public higher education should reflect the policy objectives of the state. Unfortunately, the quality objectives of states are not usually clearly articulated, and they are not identified in most budgets.

The most common approach to state financing of quality education in the public sector has been to fund a single university, or a small number of universities, at a higher level than the rest of higher education so they could develop strong scholarly reputation. California, Minnesota, Illinois, and Michigan have utilized this strategy, and among the SREB states, Texas, North Carolina, and Virginia have also provided a relatively high level of funding to their "flagship" institutions.

A related approach, which has been tried with considerably less success, has been the so-called program funding or mission funding of specific program areas. This variation recognizes that distinctions between universities frequently get blurred, as regional universities get approval to develop selected graduate programs, including some of the more expensive professional programs in the health professions and engineering. It also recognizes that resources have to be allocated selectively and that there is not enough money to make across-the-board improvements in a big university. Programmatic funding generally starts from a definition or redefinition of the programmatic mission of each institution and in some instances may also include an evaluation of the quality of programs. Such a review in Louisiana resulted in the elimination of a number of programs. Kentucky and Florida have both been trying to implement somewhat different versions of programmatic funding.

A third approach provides specific funds that are targeted on quality objectives. Tennessee has been trying to implement the "value added" definition of quality through its "Performance Funding," while Virginia has been trying to encourage innovation and instructional improvement through a Funds for Excellence Program. Several of the southern states, including Florida, Kentucky, and Maryland, either have, or are considering, variations of specific quality funding. They usually involve some competition between institutions for funds; they also involve a fairly small percent of the budget and have been criticized by some institutional personnel as providing a little money for some new fringe activity and glossing over the basic underfunding of higher education.

The state interest in quality is also being emphasized by legislative "sunset" reviews, program audits by state agencies, program reviews by higher education agencies, and in a few states (like Maryland) by state involvement in accreditation. Conceptually, program audits and "sunset" reviews should affect future budget recommendations. In practice, these reviews, which are being conducted in over forty states, are of limited value in quality assessment because of their "all or nothing" character. There is no likelihood that the state will "sunset" the higher education function. Program audits have limitations as well, because there are no generally accepted criteria for program effectiveness. If the purpose of the audit is to see if legislative intent is being followed in programs and activities, most higher education legislation is too broad and general to provide auditable criteria that can be applied to specific program activities. There seems to be little connection between performance audits of parts of higher education and subsequent budgetary decisions (Peterson, 1977).

Program review of both new and existing programs is a responsibility of about half the state higher education agencies, and about forty of the statewide agencies review new programs (Barak and Berdahl, 1978). The focus of these program reviews has been need for the program, consistency with institutional mission, and cost. Program quality is considered in nine of the state review processes (Barak and Berdahl, 1978) or about 40 percent of the states that review existing programs.

The links between program review and budget decisions are not very direct. A decision not to approve a new program or to discontinue an existing one has budgetary consequences, but the state agency may promise not to reduce resources when the program is eliminated as a

way of obtaining the cooperation or at least the acquiescence of the institutions that are involved. For example, the extensive process of quality reviews (using peer reviewers) that was conducted in Louisiana by the Board of Regents, which led to the termination of more than twenty-five doctoral programs, was explicitly justified as a way of using resources more effectively not as a way of saving money.

Budget Procedures and Quality Assessment

The most extensive effort to link evaluation to budget decisions was through the program budgeting and Zero Based Budgeting reforms of the late 1960s and early 1970s. PPB and ZBB are conceptually similar. Program activities are defined in the budget, funds are allocated for programs, program accomplishment is then evaluated against performance criteria, and the results of the evaluation are used in the next cycle of planning and allocation of funds. Conceptually, it links planning, fund allocation, and program evaluation in a rational cycle which should lead to more effective programs. In practice, it has generally been judged a failure.

Wildavsky (1975) has been one of the major critics of PPB; he points out the incongruence between the political process of negotiated compromise among competing interest groups in the conventional budget process and the technocratic rational planning model of PPB. The decision makers in a PPB system are primarily bureaucrats seeking long-range program goals that are defined within the agency or organization. The decision makers in the budget process are politicians who are seeking a short-run compromise among competing interest groups with different goals and objectives. In the conflict between technocratic rationality and political rationality, Wildavsky sees political rationality (the conventional budget process) winning every time; his predictions have been largely borne out by the developments of the middle and late 1970s.

Peterson (1977) provides a good account of the efforts to introduce PPB in Hawaii under what might be thought of as a favorable political environment, the support of both executive and legislature for the process. The legislature soon demonstrated that it had a limited commitment to the process and insisted on continuing the traditional budget formats, while largely ignoring the performance measures. The representatives of higher education resisted the development of elaborate outcome measures as being both burdensome and in many instances irrelevant to the real "quality" of the institutions.

Hawaii provides a good example of a state that made a major multi-year effort to introduce program budget reforms that include performance or outcome measures and gradually modified the process to reduce the outcome measures being required. Peterson points to the difficulty of obtaining agreement about the performance objectives and about the difficulty of obtaining measures, once the objectives are defined.

The major thrust of PPB and ZBB budget reform came from federal and state budget specialists; PPB was initiated at the federal level, spread to a number of states, and was modified or abandoned rather quickly in most states because there was little or no political support for it in the legislatures. ZBB was an alternate form that was designed to work better. When it was introduced in Georgia, higher education was largely exempted from applying its principles.

Given that a PPB reform and rationalization of the budget process is likely to conflict with political decision making, are there some budget reforms that could be undertaken by states that would take advantage of the great power of the purse to encourage or reward better performance and improved quality in education?

It was this question that led to the Tennessee Performance Funding Project, a multi-year effort to define performance objectives and develop performance measures that would be part of the Tennessee formula budgeting process. This project was initiated by the Tennessee Higher Education Commission (THEC — the statewide coordinating board) which was trying to add qualitative criteria to a state funding formula which operated on an "average cost" basis.

Following the completion of a three-year developmental period, in which foundation funds were used to encourage institutions to develop measurable performance objectives, the commission proposed that a small percentage (2 percent of the budget allocation of each institution) be based on a series of performance indicators, and the FY81, FY82, and FY83 budgets contain a performance fund allocation which institutions can "earn" if they measure up on the various indicators. The indicators include whether or not each of the professional programs of the institution is accredited (where a recognized accreditation process is available), how graduates of the institution have done on licensing exams (in fields where exams are required), whether or not the institution has an **institutional** process for measuring achievement gains of students as they progress through the system, etc. Depending on the number of indicators that an

institution can qualify on, the appropriation can be increased up to 2 percent. On average, institutions qualified for about 60 percent of the bonus money in FY82. For 1982-83 the name of the fund has been changed to the "Instructional Evaluation Fund," which more accurately describes the criteria for the fund.

The Tennessee approach rewards performance after it has occurred, and the funds received can be used in any part of the budget. All of the institutions are judged against the same criteria, and some of the same questions that arise in PPB evaluation are involved in the THEC process. Do the criteria used cover important aspects of the institutional performance? Are there adequate measures of the criteria? The Commission program was included in the budget because the concept appealed to some of the legislators and the State Commissioner of Finance, because the proportion of the budget that was affected was relatively small, and because the concept is a hard one to be against in today's political climate.

Evaluations of the performance funding feature by Tennessee leaders is mixed. Most legislators like the concept. Educators agree that it focuses attention on the important question of student learning, but they do not think the performance indicators are adequate. As one college president put it, "Until we have better measures of performance, we shouldn't put any more of the budget into the performance category." Another president said that now that the state had made the point that performance was important, they should leave the evaluation up to the Governing Board and not try to link it to the budget. Still another said, "It's important to make us think through what we are doing and should be continued, but we need better measures of performance."

The value-added concept of quality presents major problems to anyone trying to incorporate it into the budget because of the lack of clarity or consensus on student learning goals or the most appropriate measures of those goals (see Astin, 1982). To add this dimension to **state** funding decisions inevitably gets a number of people at the state level involved in defining and measuring student outcomes, an area where institutions have had almost complete autonomy. Because of these problems, other states have not drawn on the Tennessee experience.

The "prestige" definition of quality has been used in several states as a means of focussing some state attention on quality improvement. The inadequate standing of the state's universities

among their peers in other states is brought to the attention of state leaders, who agree that their state's institutions ought to measure up to national ratings of quality. For example, Florida involved a number of state leaders in a review of the status of their university system as compared with the University of California. The state leaders agreed that Florida did not measure up in nationally ranked graduate programs, faculty salaries, per student expenditures, etc. More importantly, state leaders agreed that it was important for the University system to be competitive nationally, because stronger universities were directly linked to the state goal of attracting more high technology industry.

It was clear at the beginning that there were not enough resources for all nine public universities in Florida to become comprehensive graduate and professional institutions, and it was also clear that Florida (and the nation) did not need that kind of expansion. Therefore Florida proposed a selective, programmatic development of its institutions. Florida, like other states, has had trouble with the politics of program improvement. The two established universities, Florida and Florida State are located in north Florida, away from major population centers. Florida politics are more localized than in most southern states, and the representatives of the Miami, and to a lesser extent, the Orlando and Tampa areas have pressed hard for programs and funding that would make the universities in their areas preeminent. The result has been continuing political conflict about the roles and missions of each institution and a failure to pursue any programmatic or funding goals with consistency long enough to secure results.

This last biennium the Kentucky Council on Higher Education proposed a variation on programmatic funding called the "Mission Model" which attempted to link funding levels more closely to institutional roles. This led to most of the funding increases going to the University of Kentucky and the University of Louisville. The whole concept was viewed as a threat by the regional universities, which obtained a compromise that was closer to the historic pattern of funding. In addition, in the ensuing legislative maneuvering, the council membership was restructured, and a proposal for a modest one million dollar "Fund for Excellence" which would have represented specific funding for quality objectives was eliminated from the budget.

These two examples suggest that in most states it will be difficult to deal with the politics of programmatic funding and the ac-

companying allocation of programs among institutions, especially during a period when small and inefficient programs at some institutions will need to be merged or terminated.

A state does not have to set a goal of high national ranking for its universities to give some budgetary emphasis to quality improvement. It can provide support to any of its institutions that define improvement programs and pursue their development. The Virginia "Funds for Excellence" program is an example of a funding strategy in which all institutions are eligible to compete.

It is designed to provide limited support for activities "that are demonstrably excellent, that have the potential to become so in the future; or that offer a unique or outstanding service to the Commonwealth. This funding mechanism . . . acknowledges . . . that Virginia's state supported institutions of higher education need additional assistance in maintaining and enhancing excellence and flexibility" (1982 Guidelines for Submission of Institutional Requests for the Virginia Funds for Excellence Program).

Funds are appropriated to the Virginia Council for Higher Education and are distributed by the Council on the basis of competitive proposals from the institutions. An institution cannot request funding for more than 1 percent of its educational and general budget for the current year. A variation of this idea is used in Indiana, where special proposals are submitted as a part of the regular appropriations request and are considered by the Indiana Commission on Higher Education as a part of the total budget request process.

The Virginia fund leaves the definition of what is important for excellence to the institutions; there are no predetermined definitions. What is proposed are improvement activities that are consistent with faculty and administration priorities and values. The funds received by the institutions must be used for the program they propose, and the program provides for an evaluation of the extent to which the goals specified in the proposal have actually been achieved.

Florida is using another type of incentive-funding, a matching fund to encourage private gifts to the universities, which can help provide the "margin for excellence" that the basic state appropriation does not achieve. This idea is a variation on an earlier "Eminent Scholars Program" developed in Virginia to match endowments that would provide support for recruiting more distinguished faculty. The

matching grant concept is used by several other states, including Maryland and Nebraska. It is a concept that has been used by foundations for a number of years as a stimulus to giving. Matching grants are also a common feature on intergovernmental funding, where one level of government uses the matching concept to get another level to do something. The Florida fund gave each of the nine state universities an equal amount of money to match with private gifts that were in excess of the private gifts received in the base year (usually the previous year). If an institution failed to match (one and one-half private gift dollars for each state dollar) all of its allocation by the deadline, its funds reverted and could be used by institutions that had over-matched their allotment.

This type of matching is to promote successful fund raising. Goals for which the money will be spent are determined by the institution and its donors. Thus we could expect the funds to be spent for relatively conventional purposes like endowed faculty chairs, scholarships for excellent students, library and equipment supplements, etc. In fact, that is the way most of these funds have worked. Other states have used the matching funds concept to reward research activity, to encourage giving to student scholarship funds, and in general to encourage and reward institutions for raising nonstate resources.

The most widespread type of state financial incentive for quality is the scholarship for student performance: on the athletic field; in academic scholarship; in music, band, drama, or other performing arts. The goal of these incentives is to recruit and retain better students who will enhance the image and the substance of an institution's programs. These incentives go directly to the student and thus are not institutional performance awards.

How Can Quality Be Promoted When Resources Decline?

In the last two years, real resources per student have declined in more than thirty states in the public sector, and it appears that the private sector is having a slightly more difficult time financially than the public sector.

What does this mean for the traditional concept that the way to increase the quality of education is to increase the resources per student? This formula for quality can still be followed in the OPEC states like Texas, Oklahoma, Louisiana, North Dakota, Alaska, and Wyoming but for most of the remaining states, real dollar increases per student seem unlikely.

If real dollars per student are declining — it is possible to preserve or perhaps even improve quality by reallocating resources and eliminating weak or marginal programs? Will the best results be achieved by leaving the resource allocation decisions at the institutional level, or should the state intervene to suggest, encourage, or require certain reallocation strategies of the institutions?

Reallocation decisions reflect the values of the decision makers. In most institutions reallocation preserves existing faculty first, the tenured faculty before the untenured, and makes initial cuts in expenditures that can be deferred, such as library books, building maintenance, replacement equipment, and (except for athletics in some institutions) expenditures for the nonacademic activities of the institution. As a short-run policy this has some logic, but as a long-run policy it will probably diminish the quality of student learning.

What is required, according to most retrenchment planners, is reallocation of resources among programs, eliminating programs where excess capacity exists, and strengthening the programs where student enrollment is continuing or growing. This is the kind of decision that institutions have difficulty in making. In the first place, it is difficult to decide which programs are "excess." Institution "A" may have too large a faculty and too little enrollment in the school of education but so may a dozen competitive institutions. If two of the "others" discontinued their programs, Institution A's problem would be solved. Individual institutions acting in their own interest have little ability to resolve the excess capacity problem. Second, program decisions typically are initiated by the faculty and faculty committees, and if there is a union, it may be involved. Even if the administration were persuaded that there was an expendable program, it might have great difficulty in persuading the faculty to agree with its judgments, and it might be simpler to make the cuts elsewhere — in smaller salary increments, for example, or cutbacks in the use of energy (see Rubin 1979).

Thus, we have a third paradox. The faculty is the proper locus of decision making to plan and develop new programs and to set and maintain standards, but in a period of retrenchment and cutbacks their self interest may conflict and external regulation or incentives may be required.

Would budgetary incentives for program reduction or resource allocation work effectively or are other types of regulation required? Several states have been developing enrollment policies aimed at

limiting enrollment at each institution to the available resources. If the resources do not keep up with inflation costs, then the enrollment is cut back to the level for which funds are available. While this may be a useful kind of regulation in some situations, in others the problem is that within certain programs enrollment has already reduced itself by student choice, so that fixed reductions of enrollment at the institutional level will not make these underenrolled programs any more cost effective. Most of the action to maintain quality will probably need to be program specific, and decisions about reallocation will have to be made at the institutional level. Some state encouragement of resource reallocation will be needed to get some institutions to move in that direction.

The Impact of the Student Market on Quality

One of the primary suggestions for encouraging quality programs is to rely on student choice to determine which programs and which institutions will survive. The rationale is that students will choose the "best" product and that quality will be enhanced overall as weaker programs, and in some cases entire institutions, are phased out. Since the political process has not worked well, if at all, to eliminate programs of dubious quality, the market process is seen by some as essential during a period of retrenchment. David Breneman has a good discussion of the operation of the market in the Jim Mingle (ed.) book on retrenchment strategy.

There are problems with the market approach to quality maintenance, and because of these problems, the operation of the market is seen by some as a threat rather than an enhancement of the quality of postsecondary education.

The first problem is that the different price of attending institutions restricts the choices for most students. Between two-thirds and three-fourths of all students apply to a single institution; nearly half of all students are part-time, and most of these are place bound. Among full-time students, over half work to help put themselves through school, and their job possibilities also limit their educational choices to some extent. The out-of-pocket costs to the student of going away from home to school are usually double or more of the out-of-pocket costs of attendance at home; the price of going out of state or to an independent school also are twice or more the price of attendance at a public institution in the state. While student financial aid has increased the proportion of students who have a real choice, the statistics suggest that less than half the customers are really able to exercise much choice.

Even if there is an imperfect market, does this reduce the validity of the market concept? Shouldn't the emphasis be on trying to make the market work better? This is the approach being taken in Colorado and some other states, which are raising tuition in the public sector and/or providing tuition equalization payments to students who want to attend private institutions in-state (Florida, North Carolina, South Carolina). By increasing student aid states can increase the proportion of students who have a choice, and this should make the market work better. Maryland is an example of a state that provides direct subsidies to private institutions to enable them to keep their charges lower. This has the effect of encouraging competition.

The second and more serious problem with the market approach is that most students value the credential and the chance to enter a good career field more than the intrinsic quality of the program. They attend more for vocational than intellectual reasons. In fact, for the great majority of students there is a trade off between the amount of academic rigor they can cope with and the career opportunities and options that it opens up for them. Students put up with the rigorous demands of medical and engineering education because they lead to lucrative careers; less rewarding career fields cannot set their standards for admission and retention so high, because they would drive too many students away.

The competition of schools bidding for students can be expected to drive standards down rather than up. It may have the side effect of holding down fees. If tuition is a major part of the resources, as it is in independent institutions, competition for students may prevent some schools from raising their fees.

Thus, the paradox of the operation of the market is that in a number of fields and for a number of institutions the pressure will be to cater to student interests by lowering standards for admission, giving higher grades, and reducing the academic content of the program. Since institutions never want to admit they are lowering their standards, the actual effects will be difficult to demonstrate. Since admission that standards are slipping will hurt recruitment, it is not surprising that college presidents' rhetoric about quality, in Howard Bowen's words, "Admits that quality is threatened, but never concedes that it is reduced."

One of the most widely discussed "quality related" budgetary adjustments is the reduction of the fiscal pressure on public institutions to maintain their enrollment. In a period of stable or declining

enrollment, "enrollment driven" formulas or funding procedures put pressure on institutions to keep enrollment up and will almost inevitably, so the argument goes, lead to lower admission standards and the offering of insubstantial programs that are fads designed to attract "credential-motivated" students.

Various adjustments have been made in most of the state formulas to provide for fixed and variable costs, marginal cost principles, or enrollment corridors within which appropriations will be insensitive to changes in enrollment. "Special hold harmless rules" are also applied in some states to institutions that are losing enrollment to protect them from having declining budgets.

A study of institutional expenditures in the 1970-75 period by Joseph Froomkin indicated that various budget adjustments were made for the public institutions losing enrollment, and they kept institutional budgets from shrinking, even when money was not available to enhance the budgets of growing institutions. In fact, the public institutions that were stable or growing in the 1970-75 period on the average did not increase their per-student support, adjusted for inflation, while the institutions that were losing did increase their per-student appropriations by a percentage which was about the same as the decline in their enrollment.

In the present period of limited resources and more widespread decline in enrollment (1980-85) the institutions that lose enrollment may also be protected, but it will require cuts in other areas of the budget to protect them from enrollment decline. Is that the best use of budget funds?

Summary and Conclusions

First, quality goals for higher education are imprecise and variable among the different sectors of higher education. Second, most state higher education financing procedures, whether formula based, program oriented, or incremental do not deal with quality issues directly. Third, whatever emphasis there is toward quality objectives in budget procedures will get the attention of institutions to those objectives. Fourth, it is much easier to get faculty to implement programs to enhance scholarship, prestige, or instructional improvement activities than to get them to develop measures of student achievement. Fifth, the usual process of budget allocation within institutions as well as between institutions keeps resources in declining programs and institutions.

The bottom line is that the budget reductions and reallocations that most institutions are likely to have to make will not necessarily lead to more effective institutions from the point of view of faculty, students, parents, the public, or legislators and governors. If quality goals are going to be emphasized, they have to be clearly enunciated, and resources have to be focused on achievement of them.

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CHAPTER 15

Maintaining Quality Programs During Periods of Fiscal Stress

Robert K. Thompson

Before reviewing the fiscal crises at the University of Washington and how the university responded, I would like to comment briefly on quality, what I believe it really means, and how it should be considered in the decision-making process.

We have already heard much about how quality may be defined.

Dr. Robert K. Thompson is Vice Provost for Planning and Budgeting, University of Washington.

It has been defined in "mystical" terms or in terms known only to academia, in terms of faculty reputation and/or program reputation, in terms of resources available to and utilized by academia, in terms of process or psychological characteristics such as faculty morale, and in terms of outputs or products. I think it is generally believed that all of the above have some relationship to how quality may be described or defined. I would only add to and highlight the human dimension of quality. We all know when we have had a "quality" experience — one where both or all partners to a relationship approached it from a positive attitude with a motivation of giving rather than receiving and a sense of responsibility for their actions. We can all tell when we have experienced "quality" because we can "feel" it. We also know when we have not experienced quality. I would thus offer the proposition that "quality" is personal in nature and that is precisely why we have so much trouble defining, measuring, and understanding it. It is a quality-of-life attribute that we can feel but that we cannot describe in neat, concise, and objective terms.

If we cannot measure quality, can we talk about it in other ways, particularly in terms of what is necessary to encourage the development and maintenance of quality? I would suggest that the maintenance and development of quality in an institution of higher education require the following:

1. A president who is committed to such goals and who reflects that committment in terms of personnel and resource management decisions and institutional policies in general.

2. Institutional Leadership — Deans, Vice Presidents, Directors, and Chairs — who reflect these same values and behavior.

3. The financial wherewithal and flexibility to do what is necessary to attract, retain, and support individual faculty members who are committed to these goals. This requires adequate salaries including flexibility to meet serious market place problems such as we now see in Engineering and other disciplines; time to do what they are hired to do; departmental support in the form of laboratory assistance, secretarial assistance, hourly help, travel, computing assistance, supplies and materials; library materials and services; administrative support; and adequate facilities. It will also require financial support for students.

4. A long-range, planning-oriented management process which will ensure the institution is using its limited resources for the best purposes and assist in establishing stability over the long run so that programs can expect to function without excessive perturbations of one kind or another.

5. A collegial team approach to the management and operation of the entire institution including students, faculty, administrators, and institutional board members.

In a period of fiscal stress the above requirements become even more important. When funding is inadequate to meet the ongoing needs of programs, hard but sensitive decisions must be made to assure the well being of the whole enterprise.

The University of Washington Fiscal Stress Time Table

In the late seventies, the State of Washington experienced population and economic growth unparalleled in its history and significantly greater than the country as a whole. This economic growth created expectations for the future that would lead the state into a major crisis.

Going into the 1979-81 biennium, the state legislature spent all of the proceeds of economic growth to mount new programs, take on new commitments, and fund programs at relatively generous levels. The State of Washington's economic balloon began to lose air in the 1979-81 biennium. In April of 1980 the Governor ordered cuts of all state agencies equal to 3 percent of second-year budgets. In a period of approximately two years, from April 1980 through July 1982, the University of Washington suffered five specific budget reductions and received an initial 1981-83 biennial budget appropriation below carryforward costs. These reductions totaled some $45 million, excluding legislative action to defer second-year salary increases which saved an additional $9 million. This then was the fiscal situation facing the University of Washington over the last two years.

The University of Washington's Approach to Fiscal Crisis

Program quality long has been a concern to the University of Washington. All graduate programs are reviewed regularly, the results of which are made available to deans and departments for use in program and resource planning and in budget allocation decisions. These reports are reviewed by the central administration as well as

deans, chairs, and departmental faculty. Faculty are reviewed annually for salary increases, and salary increases are heavily weighted by merit considerations. Approximately two-thirds of annual salary increases are usually awarded on a merit basis. Tenure and promotion decisions are carefully reviewed at all levels in the institution.

A new president arrived on the scene in the summer of 1979. After his arrival, a series of overall academic program reviews were conducted with each dean to acquaint the new president with the operations of each of the University's major colleges and schools, their problems, strengths, and aspirations. In addition, all administrative units participated in a modified zero base budget review process wherein they were asked to identify their administrative support activities, the personnel associated with those activities, the nature of the requirement for the activity (mandatory, required, necessary, useful), and an assessment of program efficiency and effectiveness. These reviews, which were designed both to acquaint the new president with the University of Washington and to identify potential resources for other purposes, served to be very useful when the fiscal crisis came upon us.

The first in a series of budget reductions came in April of 1980 and totaled $4.7 million or 3 percent of the second-year budget. Since the University had just completed a review of all academic and support programs, this reduction was implemented on a largely selective and differential basis. A number of program and budget reductions were identified centrally by the University administration on the basis of there reviews, and further reductions in noninstructional areas were carried out after a subsequent target budget cut review process.

In October of 1980, the Governor ordered a further reduction equivalent to 2 percent of the University's second-year budget. A few months before the Governor ordered these reductions, she had also ordered all state agencies and institutions of higher education to submit budget requests for the 1981-83 biennium at a threatened 12 percent cut target budget as well as the normal request level. While the necessity for a 12 percent reduction was unknown due to uncertainties around the economy and subsequent legislative actions and priorities, the president of the University initiated a formal review of all academic-support units in order to be ready for what might come. Given the initiation of this formal review process, subsequently termed the University Review, the 2 percent reduction ordered by the Governor in October of 1980 was spread across all programs and units on an across-the-board basis pending the conclusion of the University

Review. The Review was ordered to address two major concerns:

1. the possibility of a massive state-ordered reduction threatened by the Governor's target budget and

2. a feeling that the University was overextended programmatically in relation to financial resources and that further cuts were necessary whether or not the state's economy faltered and the state budget then cut further in the next biennuim. In addition, there was a need to identify funds which could be used for reallocation to higher priority purposes and for new directions.

The 1981 Legislature completed action on the initial 1981-83 biennium budget in April of 1981. That budget assumed the economy would stabilize and that Washington's economy would continue to outperform the country. It incorporated some revenue measures including massive increases (70 percent over two years) in tuition and fees in Washington's public higher education system. The University of Washington budget for 1981-83 was approximately 2 percent or $7.8 million short of the amount required to carry forward 1979-81 program levels given an allowance for inflation, the implementation of a new annual 3.1 percent merit pool concept, annual increases in salary of approximately 7 percent, and a new College of Marine Sciences. Since the University Review was already in process and some conclusions could be drawn from it, the $7.8 million reduction was cut from University programs on a largely selective basis when the initial budget was established in July of 1981. The selective decisions were based largely on information gathered in the University Review through that date, although the University Review was not yet finished and was not expected to be complete until December of 1981.

Three months after the biennium started, the Governor issued an executive order asking all state agencies to begin implementing plans to cut their initial state General Fund budgets by 10.1 percent. The economic assumptions in the legislative budget passed the previous April had proven to be faulty, and the Governor was required under existing state policy to reduce expenditures to bring them in line with projected revenues. On the campus, the prospect of an additional 10.1 percent cut was devastating to the campus community. A few days after the Governor's announced 10.1 percent reduction plan requirement, the University administration, in concert with the Faculty Senate, recommended that the Board of Regents declare a state of financial emergency. The University administration in consultation

with the Faculty Senate, including student leadership, began the process of defining how it would cut an additional 10.1 percent or approximately $32 million out of the University's budget, where it would cut, and what schedules and procedures would be necessary. While the University was developing its specific plans for these reductions, the Governor called the Legislature into session and recommended that the Legislature implement certain revenue measures to ease the impact of the required reduction. The Legislature subsequently reduced the University of Washington's cut from 10.1 percent to 5.5 percent or approximately $17 million. The University then rescinded the financial emergency feeling that it could accommodate to those budget reductions without the emergency elimination of programs and removal of tenured faculty.

The University's approach to the December 1981 budget reduction of $17 million again made significant use of the University Review process. Administrative and joint faculty-student-administrative committees spent a great deal of time reviewing University Review documents from academic and support units and in the preparation of reports for certain functional areas such as Student Services, Institutional Support, Plant Operation and Maintenance, Libraries, Hospitals, and Public Services. The budget reduction strategy was again to first cut as much as possible through centrally directed selective reductions in certain areas such as Public Services, Student Services, certain administrative functions, certain Physical Plant related functions and other ancillary support services. Once this was completed, the remaining reductions were identified in academic units on the basis of the University Review process. Here again, reductions were made on a differential rather than an across-the-board basis.

In April of 1982 the Legislature, in special session, passed a series of measures both increasing state revenues and cutting state programs further. The University's share of the April reductions was 2 percent or approximately $6 million. To make matters worse, a few months later the Governor was forced to bring the Legislature back into session to deal with a further revenue shortfall, whereupon the Legislature enacted further revenue measures and cut the University's budget an additional 2.4 percent or $7 million. These two reductions weighed heavily on the University community. While the University was able to implement a number of measures to accomplish these reductions in the current biennium, the measures employed were temporary in nature leaving the University with the problem of how it would cut the equivalent of $13 million as it entered

the next biennium. The temporary measures available to the University administration included legislative passage of an Early Retirement Program which has resulted in a number of faculty and staff early retirements and position vacancies, savings from a faculty and staff hiring freeze ordered by the Governor, an unusually warm winter with subsequent fuel savings, a decision to burn the coal and fuel inventory to absolutely minimal levels, lower inflation than was anticipated in the beginning budget, and certain temporary revenue measures such as additional interest income on invested fund balances.

At this point the University administration accelerated the University Review in order to identify how it would go about implementing the $13 million April and July Legislative cuts on a permanent basis. After a long summer of extensive discussions between the administration, representatives of the Faculty Senate, deans of the University's colleges and schools, and faculty throughout the campus, the University announced a series of proposed reductions and program eliminations which, when fully implemented, will result in permanent savings of $13 million. An important element of the program reductions and eliminations just announced was the decision not to eliminate tenure positions from programs being eliminated. Tenure postions in these programs will be reassigned in other units.

This brings us to the present. Carryforward budget reductions have been identified, and the University is ready to enter the 1983-85 biennium trimmed down in programs, number of students, and in services. A 1983-85 Biennium Budget Request has been submitted to the Governor which identifies the following priority needs:

1. funds to maintain enrollment at current levels, e.g., 30,000 FTE students over the academic year as compared to an initial budgeted level of 31,000 FTE and a carryforward budget enrollment capacity of 28,500 FTE;

2. funds to improve Instructional Support, Equipment Replacement, Academic Computing, and Library Collections and Services;

3. funds to provide minimum financial services and to maintain the Physical Plant at levels which will at least stop the accelerating rate of deterioration;

4. a small amount of funds to assist the state in economic development and recovery; and

5. last, but not least, a new financial structure has been proposed which would provide the University with additional flexibility and stability over the long run.

The Maintenance of Quality

How has the University of Washington endeavored to maintain its quality throughout this fiscal crisis? I would summarize the University's efforts in the following manner:

1. the use of existing program review processes and the implementation of a special University Review of all academic and support units;

2. the University's efforts to maintain quality were helped substantially by the participation of faculty and students. This participation contributed greatly to the quality of the decisions and to their ultimate implementation;

3. the provision of flexibility to all units of the University in the budget reduction decision-making process. The University administration generally did not advise academic or support units where to cut or how to cut, with certain exceptions;

4. an unwaivering commitment to the major goals and priorities of the University;

5. the University's approach to the budget reduction was tied to the long-range future of the University, as defined in the University Review. Budget reductions were made selectively and differentially to the maximum extent possible in order to assure that limited resources were used for the highest priority purposes;

6. the University long-range plan was committed to the allocation of limited resources to the highest priority purposes including reallocation;

7. the University had to come to grips with the issue of quantity and quality. It could not continue to serve large numbers of students with an inadequate level of financial support;

8. the University will use attrition management throughout the University to help with the phased implementation of the most recent program and budget cuts and eliminations; and

9. it is extremely important for the future that the University achieve some measure of stability in its programming and financing. The most recent two-year period, if it has done nothing else, has underscored the need for stability in student planning, academic planning, and administrative planning, and the need for sufficient financial reserves and financial flexibility to help accomplish these goals.

State Policy Considerations

In reviewing our experience over the last two years in the context of our relationship with the state, a number of conclusions emerge. First, the University did have flexibility to cut programs and budgets without state intervention. Second, the University community felt a sense of helplessness in that they did not have the capacity to deal with other elements of this problem. The University had no reserves to use to cushion the impact of the substantial reductions and allow for a more considered implementation. Third, the state's approach to the budget problem resulted in a University community view that state leaders were not concerned with the quality of higher education and its role in the economic future of the state.

This concern with state priorities is an important element of the University's efforts to improve its lot and that of higher education. The University's financial proposal underscores the need first for an **adequate** level of state tax funding appropriate to an institution's role and mission and enrollment. An adequate level of state tax funding will go a long way toward assuring the viability of the University of Washington and the quality of programs. Additionally, the University has requested financial flexibility in the form of tuition and fee increase authority and local revenue retention without state tax fund offsets. These policy changes will provide flexibility to adapt to short-run problems as well as meet long-range goals and provide some stability for long-range planning.

CHAPTER 16

Quality and its Financing

James A. Hyatt

In September of 1982, the Financial Management Center of the National Association of College and University Business Officers (NACUBO) conducted a survey on "Quality and its Financing." Its purpose was to have knowledgeable individuals at public higher education institutions and state coordinating boards comment on "academic quality" and state and institutional mechanisms for funding "quality" improvements.

The survey was distributed to sixty-six individuals in twenty-one states. A total of twenty-three persons responded to the survey. Of this group, seventeen were from public four-year colleges and universities, three were from community colleges, and three were from state higher education coordinating boards. States represented in the survey are displayed in Figure 1.

Figure 1

States Represented by Survey Respondents

West (10)	South (7)	Midwest (3)	East (3)
California (2)	Florida	Illinois	New York
Colorado	North Carolina	Iowa	New Hampshire
New Mexico	Mississippi	Minnesota	Connecticut
Idaho	Virginia		
Utah (2)	Georgia		
Arizona	Maryland		
Montana	Texas		
Washington			

James A. Hyatt is Associate Director, Financial Management Center, NACUBO.

The survey contained the following questions:

1. How is "academic quality" defined in your state?

2. To your knowledge, do state-level administrators hold a different view of quality from administrators on your campus?

3. Does your state encourage or reward quality improvements in the academic area through any special, separate budget appropriation mechanism or by other means?

4. Has your institution used the argument of erosion of instructional research or public service quality as a justification for maintaining or increasing appropriation levels?

5. In your state, with your definition of quality and given current appropriation levels, can your institution maintain quality in its programs? If not, in what areas will quality decline?

6. At the institutional level, do you fund for "quality improvements?" How is this done?

The sections that follow provide a summary of responses to each of the questions contained in the survey. Because of the size of the sample, it is not advisable to view these responses as an all-encompassing overview of how quality is defined and financed in the fifty states.

Definitions of Academic Quality

The majority of persons responding indicated that academic quality was not well defined in their states. One respondent said that quality should be defined as the composite of several variables including amount of research funding at higher education institutions, the SAT scores of entering freshmen, the retention rate of students, the number of faculty with terminal degrees, and the employment rate and salaries of graduates. Another respondent noted that quality has a number of dimensions, including well-qualified and productive faculty, ample and up-to-date equipment, adequate and well-appointed facilities, and appropriate support services, such as libraries and computer services. For this respondent, the ultimate test of quality was the success of graduates in their chosen careers or graduate education.

While respondents were unable to provide a uniform definition of academic quality, they did suggest a number of proxies or indicators of academic quality. These included

1. reputation of instruction, research, and public service programs;
2. reputation of faculty, including number of publications;
3. number of accredited programs among those eligible for accreditation;
4. amount of library holdings;
5. quantity of classrooms and various pieces of instructional support equipment;
6. success of graduates in the labor market;
7. number of degrees awarded by the institution; and
8. student scores on standardized exams, e.g., NCATE and CPA.

State and Institutional Perceptions of Academic Quality

The majority of respondents indicated that state-level administrators hold a different view of academic quality than campus-level administrators. To some, these differences were subtle and mirrored the diversity in the goals, missions, and delivery systems of the various colleges and universities in their states. Others, however, felt that state-level administrators did not adequately understand the concept of academic quality. One respondent, for example, noted that state-level administrators have "little appreciation for scholarly work that does not necessarily produce instant, tangible results. Teaching is viewed as processing so many students."

In terms of state or institutional responsibilities for monitoring academic quality, one respondent indicated that

> I am not convinced that state-level administrators can or should address quality on other than an exception basis. In other words, if citizens and students perceive a lack of quality on more than a

random, piecemeal basis, something should be done at a management level. If not, what purpose is served by administrative systems to measure "quality?"

To a significant number of respondents, campus administrators' perceptions of quality were characterized by several **process** measures, such as high quality instructional programs, advances in research, and dissemination of new knowledge. State-level administrators' perceptions of academic quality, however, were characterized to a greater degree by **output** measures, such as degrees awarded, employer satisfaction with college graduates, and accreditation reports.

Financing Quality Improvements in Public Higher Education

In all the states surveyed, except California, Florida, and Virginia, there were no formal mechanisms for funding quality improvements. A number of respondents indicated that the absence of such a funding mechanism was due in part to the state's inability to establish appropriate quality achievement criteria.

In those states that foster quality improvements, the support methods are varied. California provides merit and promotional funds for faculty, permits institutions to use academic salary turnover savings for upgrading purposes, matches funds for the Instructional Improvement Program, and provides funds for faculty research grants and travel. In Florida, a separate line-item appropriation for "Quality Improvement" has been provided for each of the last four years. Virginia has encouraged innovation and instructional improvement through a Funds for Excellence Program.

A number of respondents indicated that their states have considered or are proposing funding quality improvements. Mississippi, for example, has appropriated a small amount ($60,000) for fiscal year 1983 to examine the feasibility of establishing Centers of Excellence in the state's three major public universities. In Georgia, a formula revision proposal, related to quality improvement, is currently under consideration. Maryland is also considering a program. Utah currently encourages quality higher education by reinforcing institutional decisions to hold enrollment down in order to avoid eroding quality. The state also attempts to fund enrollment growth at a marginal rate that will generally avoid quality reductions.

Erosion of Academic Quality as a Justification for Support

A majority of respondents indicated that they have used the argument of erosion of instructional, research, and/or public service quality as a justification for maintaining or increasing appropriation levels. In most instances, these arguments were buttressed by a variety of input variables, such as student/faculty ratios and comparison of faculty salaries with faculty at peer institutions. In Illinois, the state board of higher education has used indirect indicators of quality to justify increased appropriations for higher education. Erosion of faculty and staff compensation compared to inflation and compensation offered by competing institutions are examples. Other examples include constant dollar decreases in per-student costs, expenditures for equipment, and repair and maintenance of physical facilities. In addition, an analysis of enrollment shifts from less expensive to more expensive disciplines, such as engineering and the sciences, has been used to justify additional resources for public colleges and universities.

In Connecticut, the state board of higher education requires that non-inflationary budget additions be justified on the basis of quality improvements. Three of the programs that the University of Connecticut annually advances in order to improve quality are (1) funding of the library procurement budget, (2) deferred maintenance, and (3) the addition of full-time professional staff to replace temporary lecturers in high-demand programs. The justification for these programs includes (1) comparing the library book budget to national standards for research university libraries, (2) information on the condition of the university's facilities and (3) contrasting full-time staffing at the University to national accreditation standards.

Frequently arguments for funding quality improvements are made verbally or in the narrative portion of institutional budget requests. Material submitted by respondents from California provides an excellent illustration of these arguments. Excerpts from the University of California 1983-84 Budget for Current Operations and for Capital Improvements contained the following arguments:

> The cumulative and combined effect of so many budgetary problems represents a grave threat to program quality. . . . The state has a long-term investment in the University and will continue to benefit both economically and socially by ensuring that the quality of the University is preserved. . . . High quality instructional programs can not be

> maintained without adequate funding — examples are deteriorating student-faculty and undergraduate student teaching assistant ratios, also, shortage of teaching assistants and demands for remedial courses. . . . Program quality is affected by physical environment. Over the last decade the university has experienced a chronic shortage of building maintenance funds.

Respondents who have used the erosion of quality as a justification for maintaining or increasing state appropriation levels have met with limited success. A respondent from Minnnesota noted that

> . . . large increases in certain kinds of enrollments in recent years have been unfunded except for tuition. Mostly, we have agreed that such increases can be managed on the margin without significant erosion of quality, but in a few cases we argued verbally and unsuccessfully that quality is being impaired.

A respondent from Washington reported that

> . . . we have been successful in getting the state to recognize that equipment must be updated and replaced if the education experience is to be adequate (meet expectations of graduates/employers). We have argued for years for increases in academic support (nonfaculty) budgets with no avail. We think we will be successful in arguing for academic computing fund improvements to erase computer illiteracy.

Can Quality Academic and Support Programs be Maintained?

Over 50 percent of the individuals surveyed indicated that the quality of academic support programs at their institutions cannot be maintained in light of current and projected declines in higher education funding. The quality of science and engineering programs will suffer due to inadequate equipment and operating budgets. Other academic programs that will suffer include mathematics, English compostion, and the high-technology programs offered at community colleges.

A number of respondents indicated that reductions in state

support will result in inadequate preparation and renewal of faculty, the depletion of instructional supplies, obsolescence of equipment, inadequate support personnel, and the deterioration of facilities and physical plant. If these conditions persist, many institutions anticipate reductions in the scope and breadth of programs.

Individual reactions to the threat of diminished quality varied between reallocation strategies, across-the-board reductions, and efforts to increase existing revenue sources. In Colorado, there is an active reallocation process underway. Reallocations are based on an elaborate program-review process, which has established priorities and potential opportunities as well as areas for cutbacks or discontinuance. Respondents from Washington and California indicated that their institutions will implement reallocation procedures in order to maintain the quality of programs in high priority areas. In Arizona, efforts are currently underway to maintain program quality in selected areas of concentration and to increase sources of funds (other than state).

In Connecticut, state support is limited to meeting contractual requirements and only a portion of inflationary cost increases. As a result, the University of Connecticut has turned to increased tuition charges and private funds for quality maintenance. A 16 percent tuition increase has been proposed for 1983-84 in order to offset reductions in federal student financial aid and to provide additional support for equipment, library materials, and consumable supplies. The main area of quality decline at the University of Connecticut has been in administrative support.

A respondent from Iowa indicated that

> . . . under the circumstances it seems apparent that our institution will be able to maintain certain levels of quality in its programs. However, the institution believes that this quality is nevertheless shrinking in certain areas due to the absence of adequate financial support in the past two years as well as the upcoming biennium period.

Respondents from New York and Florida reported that they were fairly confident that quality programs will survive. A respondent from Utah noted that quality can be maintained "if we control enrollment in optimal ways and make the hard redeployment decisions."

Institutional Efforts to Maintain and Improve Academic Quality

Over 70 percent of the individuals surveyed indicated that their institution provided funds for quality improvements. These funds were used primarily for instructional improvement and took the form of merit increases for faculty and grants for faculty travel and research. A respondent from Colorado, for example, reported that

> . . . faculty salary increases are highly differential and are based on the reputation, program review results, and research activity of a department. Similarly, new positions are meted out partially for student demand reasons but also for quality enhancements. Research seed money funds have been allocated to each campus for young faculty with interesting research proposals. Other fund pools are being allocated in a similar way to support (and encourage) initiative and worthwhile activities.

Several respondents noted that the allocation of funds for quality improvements were tied to either a program review process or an assessment of institutional needs and priorities. In Illinois, the board of higher education has "a systematic process of program review, which is used to identify needs and areas from which resources may be reallocated to high priority needs."

A respondent from Mississippi reported that

> . . . when new programs are sought or improvements are requested, the institutional administration will insist on a well thought out justification. If that justification survives several levels of bureaucracy, an attempt is made to fund the project or, if large in amount, such as equipment or facilities, to press the request at the state level for funding.

In a similar manner, a respondent from Connecticut described how his institution

> . . . continues to examine its internal allotment patterns in order to improve the quality of its higher priority programs. Annual program review and evaluation efforts lead to short- and long-term fiscal programs. For example, the school of en-

gineering needed to improve its equipment holdings. The institution channeled an increasing proportion of its equipment budget to the college of engineering in order to insure that this goal was met.

Institutional efforts to fund quality improvements take a variety of forms. An institution in Minnesota maintains a fund for the improvement of instruction, while an institution in Idaho has a special capital equipment fund for defined needs and an academic excellence fund established through a foundation. In Arizona, an institution has established a $400,000 per year fund to promote instructional quality improvements, a $200,000 per year fund to promote excellence in the area of the science and humanities, and a $250,000 per year program for employing additional instructors (above basic allocations).

PART VII

SHEEO NETWORK CASE STUDIES: CONSEQUENCES OF BUDGET REDUCTION STRATEGIES

CHAPTER 17

The Washington Experience: Or The House that Jack Built and is Now Remodeling

Denis J. Curry

> Financial cuts may threaten quality and efforts to improve quality may threaten access. How can today's institutions reduce cost and at the same time maintain or enhance quality? How can educational quality be achieved without endangering access?

In public two- and four-year institutions of higher education in the state of Washington, we have a situation where state general fund appropriations for higher education as a share of total state appropriations have declined from over 20 percent in the late 1970s to an estimated 15 percent in the next school year. Similarly, over the past four years, total Washington state appropriations have increased 65 percent. State general fund appropriations for higher education have increased by slightly less than 26 percent. If appropriations from building account funds for operating purposes are included, the

Denis J. Curry is Deputy Coordinator for Finance, Washington Council for Postsecondary Education.

growth is 34 percent over the past four years. In any event, growth in appropriations for higher education has been less than half of that of all other state functions.

Looking forward to 1983-85, we have this situation. First, the original budget approved for the 1981-83 biennium was tight but not unreasonable although funded enrollment level for community colleges was set at previously budgeted levels and did not take into account enrollment growth which had actually been experienced during 1980-81. Part of the reason that the budget level was reasonable was that the majority of building fund balances had been appropriated for operating purposes in the four-year institutions and substantial tuition and fee increases had been imposed at all levels. Second, the biennial cuts made to date in public higher education appropriations equal about 8 percent. We estimate that the 1982-83 budget levels are from 12 to 20 percent below the original intended level due to the timing of the reductions — December 1981, April 1982, and July 1982. Third, the decision to authorize salary increases on the last day of the biennium will create a carry-forward cost of approximately 6 percent of total budget with no funds currently in hand to bear the costs of that commitment. Fourth, higher education is currently dependent upon $73 million in building fund appropriations which will not be available in the next biennium. This equates to another 7 percent carry-forward cost problem. The total unfunded problem as we look to 1983-84 is about 25 percent of current budget **without any other increases in costs, no inflation, and no further salary increases.** This problem equates to about one-quarter of a billion dollars, an amount equal to the total general fund budget of the three regional universities and The Evergreen State College.

With modest allowances for inflation and salary adjustments we estimate that the increase needed in the next biennium — just to carry forward reduced levels — is over $380 million, and the amount needed to restore original levels of formula support and make modest improvements in equipment, support costs and fund highest priority programs, comes to one-half billion dollars over current general fund appropriations.

The charge is clearly on higher education, and those concerned with its future, to demonstrate that the trend of a reduced share of state revenue must be reversed and that support levels providing a basis for quality services must be made available. The key to this process is the effect of the series of reductions — which actually began

in 1980 — and the steps which institutions have taken to manage those cuts responsibly.

The legislative cuts have — with only one or two exceptions — been equal for each institution and the community college system institutions have been allowed a maximum degree of flexibility in deciding how the reductions would be made on campus. In my opinion our institutions have responded well to the challenge. The early cuts tended to be across-the-board, with travel and hiring freezes, deferral of equipment and library purchases, etc. At that time there was a strong feeling on most campuses that the cuts were temporary. We at the state level felt that they were likely to be with us for some time.

As the major reduction occurred in fall 1981, more short-term measures were initiated. In community colleges part-time faculty contracts were not renewed, resulting in elimination of many course sections and offerings and an enrollment reduction of 6,000 FTE students, largely in occupational, supplemental, home and family life, and general studies nondegree areas. Areas which could more easily be cut were cut most heavily — plant maintenance, student services, library materials and hours, and equipment replacements. Some nontenured faculty were laid off and hiring and travel freezes were continued and stockpiles were reduced.

As the series of cuts continued, institutions moved into the phase of selective cuts, and this is where my subtitle comes into play — the remodeling process.

Beginning in early 1982 each institution has in varying degrees and approaches initiated a significant internal review of its priorities and programs. The University of Washington has announced plans to eliminate twenty-nine degree programs and consolidate or reorganize a number of departments and nondegree activities. Washington State University has eliminated six instructional programs, five research programs, and reorganized another six units. Central Washington State has closed its Hebler Elementary and Speech Pathology and Audiology programs, and Western Washington State has dropped its Center for Urban Studies and Fairhaven Bridge Project. Evergreen was aided by a donation of Services and Activities fees from the students to retain part-time faculty and deferred its Master of Environmental Studies degree program. Eastern Washington University is now undertaking a complete review of all academic programs. Community colleges have taken substantial steps to review their offerings to order their priorities as they perceive their mission.

Enrollments in categories most suspect in earlier years have been reduced while self sustaining courses are up. What is most significant about this process is that it is clear that the house that will be put back together will not be the same. In most cases these changes, including more effective methods of instruction, will be permanent. This is the greatest benefit of the reduction process. At the same time, the support levels need to be restored, and institutions need the flexibility to continue to pursue reordered priorities.

The Council's approach has been to recognize the need for adequate funding levels, to give priority to support levels over expanded access, and to propose extended flexibility in fiscal matters to the institutions. Through this concerted and cooperative effort it is our hope that we can look back at this time of reduction as a period of reformation, producing a stronger and more effective public higher education system.

CHAPTER 18

Institutional Management Flexibility: A Strategy for Dealing with Funding Reductions

Edward A. Carter and Jack C. Blanton
Presented by Edward A. Carter

For several years, the proverbial "bottom line" of public higher education funding in Kentucky has been based upon — almost in its entirety — Kentucky Revised Statute 164.020.4. It says

Edward A. Carter is Deputy Executive Director for Finance, Kentucky Council on Higher Education.

Dr. Jack C. Blanton is Vice Chancellor for Administration, University of Kentucky.

> The Council on Higher Education in Kentucky shall consider the requirements and review the budget requests, of the institutions of higher education as to their appropriate level of support considering the functions of the institutions and their respective needs.
>
> The individual institutions' budget requests, including tuition and registration fee schedules for all categories of students, along with the Council recommendations shall be submitted to the Governor through the Department of Finance no later than November 15 of each odd numbered year.

Based upon the rather straight-forward instructions in the Statute, the Council considers the institutions' biennial funding requests in light of the institutions' priorities, our assessments of the overall needs of the system of higher education, and the priorities we assign to those statewide needs.

Then, the Council's recommendations for institutional funding and the institution's funding requests are reviewed by the Governor and his budget staff. That review results in the Governor's recommendations for higher education funding, which are included in the executive budget, a document that is presented to the legislature for making the biennial state appropriations. Once appropriations are made to the institutions, the respective boards of regents or trustees and administrators determine how to best use the funds they receive.

Higher education approached the funding cycle for 1980-82 with a state appropriation base of $314 million for operating budgets. The Governor's 1980-82 executive budget recommended that the base — that is, the amount appropriated for 1981-82 — be increased to approximately $394 million.

This represented the largest dollar increase ever in higher education funding over a single biennium and was a 25 percent increase over the level for 1979-80. About 70 percent of the increase was to be used for increasing compensation of **existing** public higher education faculty and staff. The rest was to cover higher operating costs brought on by inflation and increased fixed costs, that is, maintenance and operation of new facilities and debt service on new construction on three campuses. There was no money for new programs, and there was only a small amount for program expansion.

But before 1980 was over, the "bottom line" of public higher education funding was no longer based entirely upon DRS 164.020.4. A new step in the process was added — reduction.

Shortfalls in Revenue Require Change

The shortfalls in state general fund receipts for 1980-81 which plagued not only Kentucky but other states, as well, required that the Governor take some other unpleasant steps so that a balanced budget, as required by our state constitution, could be maintained. The level of appropriations to all areas funded by state government was reduced by about $125 million, and higher education's portion of that reduction was about $30 million.

The situation worsened as 1981-82 approached. Several months before the beginning of the 1981-82 fiscal year, higher education's planned appropriation for the year was reduced by about $26 million. The institutions had hardly finished adjusting their budgets when another $18 million was cut. Public higher education funding has been reduced from $394 million to about $350 million or some $44 million less than anticipated when the biennium began.

The base increased, to be sure. But the increase dropped from $80 million, or 25 percent, to $35 million, or 11 percent. It is significant that the remaining increase fell short by $11 million of the amount originally appropriated just for campus employee cost-of-living compensation increases. The original $80 million increase included $46 million for that purpose alone.

The impact has, of course, been nothing short of dramatic. The Kentucky institutions have implemented most of the traditional responses to cutbacks: restricted travel, telephone, and supply purchases; postponed equipment purchases; cut library budgets; employed part-time faculty in place of full-time faculty; reduced secretarial staff; deferred maintenance and renovation projects; reduced general fund support of intercollegiate athletics; terminated professional and administrative staff; etc.

The one thing Kentucky institutions have not done to this point is to eliminate salary increases for employees who remain on the campuses. Given the reduction of demands which may be placed on the instructional component of higher education in the next ten years, implementing the strategy of no salary increases in a time of cutbacks is a short-term convenience which could have a devastating long-term

impact on an institution. That is one action which could encourage good faculty and other employees to seek other employment, and they will have a good opportunity of getting it in other institutions.

A Strategy of Longer Term Benefit

Strategies that have a longer term benefit should be pursued during cut-backs. One such strategy, which should provide institutions with long-term benefits, has been developed and implemented in Kentucky and may very well be unique in the national higher education community at the present time.

Currently appropriations to higher education in half the states have failed to keep up with the Consumer Price Index. As a result, these public institutions have less purchasing power today than they had two years ago (Magarrell, 1982, p. 1). In this environment, a typical reaction at both the campus level and the state level is to centralize decision-making that pertains to the expenditure of public funds. This tendency toward central fiscal oversight seems to be a natural evolutionary process for large organizations experiencing scarcity. An exception to this administrative tendency was manifested in the 1982 session of the Kentucky General Assembly. The legislative body enacted House Bill 622, a landmark statute that reversed four decades of state centralization and the steady growth of bureaucratic rules and procedures applicable to the Commonwealth's eight universities and thirteen community colleges. A number of unexpected events culminated in the enactment of House Bill 622.

In 1936, Kentucky state government went through a comprehensive reorganization. In that year a proliferation of bureaus, departments, and advisory bodies numbering in the hundreds was brought to an end. In place of the Balkanized government structure, a streamlined organization emerged and was put into place by an omnibus reorganization bill enacted by the legislature. This reorganization featured a greatly reduced number of governmental units — reduced by a factor of approximately 20 — and it provided for a strong finance department in a "strong Governor state" (Jacob and Vines, 1971). Another equally prominent aspect of the 1936 reorganization was the establishment of centralized accounting and procurement functions for the restructured state units.

The 1936 Kentucky reorganization was not originally intended to encompass the state colleges and universities. However, state appropriations to the higher education institutions were to be kept in the

state treasury, and payment documents against state appropriations were to be paid on a state check through the new centralized accounting system. In sum, the 1936 reorganization really did not contemplate that the state colleges and universities would be enmeshed in the new structure but anticipated that they would function at its fringe. In retrospect, this presumption did not prove to be the case.

Over the next four decades, state government functioned in relation to colleges and universities much like Brer Fox envisioned the Tar Baby functioning with reference to Brer Rabbit. Unfortunately, the higher education institutions lacked Brer Rabbit's cunning, and they became mired deeper and deeper in the state bureaucracy. By the mid-1970s all procurement for higher education, including capital projects, was under the central direction and control of state government in the state Department of Finance. Virtually all university funds, including student fees, were accounted for centrally, and the majority of checks to pay employees, as well as vendors, were written centrally. As one might imagine, the major complaint of university administrators in this system was that the time required to process documents through the state capitol in Frankfort was seemingly endless. Over time, a costly administrative structure grew on each campus with prime responsibility for "pushing paper" throught the state bureaucracy.

In 1982, a series of unlikely events culminated in unexpected but happy circumstances for Kentucky's public colleges and universities that freed them from most of the costly oversight of their business affairs by the state Department of Finance and other state agencies that had evolved over time.

New Governor Pledges Changes

The enactment of House Bill 622 really began with the election in 1979 of John Y. Brown, Jr. as Governor. Mr. Brown, who entered the Governor's race late in the campaign, was not cut from the same bolt of cloth as other candidates for the office. He was a wealthy businessman who had made a fortune in the fast-food business, and he had never run for public office. He pledged to rid state government of "politics" or at least its questionable aspects, e.g., job patronage, contractural favors, and the like.

Early in his administration, Governor Brown "challenged" higher education to improve its management practices. As a means of rather

pointedly demonstrating his concern for the existing management practices in higher education, the Governor put $400,000 into his 1980-82 budget for an assessment of management practices and funding levels of the colleges and universities (which the presidents all said were too low in comparison with other similar institutions) by an "outside" consulting firm. This tactic concerned many university administrators who were fearful the Governor's concept of management for colleges and universities was inimical to the higher education process.

Responsibility for implementing the "outside" management assessment was assigned to the state's Council on Higher Education. The Council staff identified six areas for review: (1) organizational structure of the institutions; (2) adequacy and utilization of resources; (3) personnel utilization, evaluation, and promotional practices; (4) fiscal management practices; (5) costs which may be inconsistent with mission or not educationally related; and (6) external management barriers to the operation of the institutions.

The Council sought proposals for conducting the impending management review and received a large number of responses. The "big eight" accounting firm of Price, Waterhouse and Company was selected along with MGT of America, Inc. of Tallahassee, Florida to carry out this important engagement in the summer of 1981. The consultants sent forth across the Commonwealth a legion of accountants and management experts to examine the finances and management practices of all eight public universities in Kentucky. Soon after the state legislature convened in January 1982, the consultants released the first phase of their report entitled, *A Study of the Management Practices and Procedures of Kentucky's Public Universities and Colleges* (Price, Waterhouse and Company and MGT of American, Inc., 1981), which dealt with the question of external management barriers and funding comparisons. To the surprise of many and the great relief of a few, the principal conclusion of the outside consultants was that state rules and regulations and the trappings of state burearcracy posed the biggest obstacle to the improvement of management at the colleges and universities.

Role of the Kentucky Council

The role of the Kentucky Council on Higher Education in bringing about the passage of House Bill 622 was at variance with the behavioral reputation of coordinating boards nationwide. These boards have been accused repeatedly of invading campus turf,

preempting the powers of governing boards, and grabbing off the functions of university administrators. Throughout the management study and the enactment of House Bill 622, the Council and its staff supported the decentralization trust. To the surprise of more than one college administrator, the Council never made an effort to be named as a replacement for the Kentucky Finance Department as "central overseer" of university business affairs. To the contrary, the council promoted the universities' efforts by taking a low key approach, allowing the universities to take the lead but providing assistance when appropriate.

In fact, after the release of the Price, Waterhouse report in January (after the legislature had convened), the Executive Director of the Council moved with dispatch to see that a bill was drafted for introduction into the state legislature that would separate the public colleges and universities from the centralized state administrative apparatus. The draft bill was further revised to take into account certain concerns that had manifested themselves in the early days of the legislature, particularly one that pertained to university foundations. This topic had consumed the attention of several legislators who were quite unhappy with a capital project that had been financed from foundation monies. After extended discussions with legislators and numerous alterations in the draft, 23 sponsors for the bill were found in the 100-member House of Representatives. The bill was dropped in the hopper late in the session. It was designated House Bill 622, and it had a precarious voyage to make before it landed on the Governor's desk for signature.

Support for the bill by representatives and senators from the home districts of all the colleges and universities was virtually unanimous. The higher education institutions had just gone through a very divisive battle over a formula for allocating state appropriations, and House Bill 622, which came to be known as the "Universities Management Bill," was just the medicine needed to heal some of the scars the budget battle had left behind.

After the General Assembly adjourned, a rumor spread throughout the higher education community that officials in the finance department were having second thoughts about House Bill 622 and were urging the Governor to veto it. On the basis of this rumor, a member of the Governor's Cabinet, a trusted advisor and the chairman of one of the universities' board of trustees, made a call on the Governor, who assured the caller that he was going to sign the bill, and he did.

The Effects of House Bill 622

The changes for business management at Kentucky's colleges and universities, which House Bill 622 affords, are in the following areas:

Purchasing. Responsibility for commodity procurement is vested with the colleges and universities. Before House Bill 622, the institutions were delegated responsibility for the purchase of certain items, while the state Purchasing Division procured other items. Now all purchasing may be accomplished at the campus level. The university purchasing director is bound by the term of the state's Model Procurement Code, as the state officials were. No longer are the universities required to buy from state central stores certain items which were in great demand with the surcharge imposed on them for the administrative costs of the centralized unit. Universities and colleges may now initiate or enhance their own stores' operations.

Capital Construction. State universities may now select and contract with architects and other consultants. Heretofore, the state government selected and employed architects for capital projects on university campuses. Universities also may advertise projects for construction and award contracts for them. This prerogative formerly was vested in the state Department of Finance. The provisions of the state's Model Procurement Code must be followed in accomplishing this objective.

Real Estate. Governing boards may employ appraisers and acquire and dispose of real property. The acquisition of property still requires the approval of the state Secretary of Finance, but all of the paperwork essential to buying or selling real estate (or other surplus equipment) may now be fully completed by university personnel. All state laws applicable to the sale or purchase of real estate must be adhered to by colleges and universities.

Fiscal Agents. Many of the capital improvements at Kentucky's colleges and universities are financed from the proceeds of revenue bond issues. Formerly, the employment of a fiscal agent whose job it was to prepare and sell bond issues in behalf of colleges and universities was the prerogative of state government; now this function may be assumed by the governing board.

Accounting and Auditing. The central payment of documents through state government has been discontinued. Under a com-

promise effectuated during the enactment of House Bill 622, certain state appropriations must be maintained centrally for investment purposes, but funds are transferred on a daily basis to each university to cover the prior day's checks. All accounting on an accrual basis, as prescribed in the legislation, is now accomplished at the campus level. The bill requires the governing boards of each institution to make annual reports to the Council on Higher Education in a format which meets the existing requirements of the Council's system of uniform financial reporting. The law further prescribes that the colleges and universities must employ a qualified public accounting firm annually to conduct a thorough financial audit, as well as an audit that speaks to the institution's compliance with House Bill 622. The Secretary of Finance may prescribe the minimum scope of any such audit.

Payroll. The State Treasurer formerly wrote all university payroll checks. Electronic data processing tapes were prepared at the campus level and then taken to the state capitol in Frankfort no less than every other week. The tapes were mounted on the Treasurer's computer, and the checks written and returned to the campus for distribution. Under the new law, all payroll checks may now be written at each campus by the university treasurer.

Personnel Administration. House Bill 622 had no impact on personnel administration in higher education, since the Kentucky Revised Statutes already give full authority for personnel matters to the institutional governing bodies.

Affiliated Corporations and Foundations. The bill authorizes colleges and universities to have affiliated corporations and foundations and operate them under the provision of House Bill 622. An affiliated corporation means a corporate entity which is not a public agency over which an institution exercises effective control by means of appointments to its board of directors and which could not exist or effectively operate in the absence of substantial assistance from an institution.

Institutional Option. The institutions have the flexibility to elect all or any number of the provisions of House Bill 622.

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PART VIII

QUALITY AND FINANCIAL STRUCTURES

CHAPTER 19

Quality and Budget Flexibility: Case Example at the University of Colorado

Marilyn McCoy

In Spring 1981 the Colorado legislature ratified an agreement between the Joint Budget Committee of the legislature and all public institutions of higher education in Colorado. At its heart, that agreement, termed the Memorandum of Understanding (MOU), transferred responsibility for financial management from the legislature to the institutional governing boards. This change created new incentives for nonstate funded revenue generation at the institutions and devolved authority for setting both revenue targets and expenditures to the institutional boards. In principle, the agreement removed major elements of state control and instituted a new level of institutional autonomy that in essence blends concepts of private sector management with responsibilities to serve public sector needs.

In brief, the major features of this agreement included the following.

1. **Expenditure setting authority** was conveyed to the institu-

Dr. Marilyn McCoy is Director of Planning and Policy Development, University of Colorado.

tional boards whereas previously the general fund budget (including revenues from state appropriations, tuition, indirect cost recoveries, and other cash funds) was set by the legislature; the MOU established the governing boards as the authority to set budgets. Tuition and sponsored programs no longer were separately appropriated; 52 line items were reduced to a lump sum at the University's general campuses and from 52 to 5 line items at the Health Science Center; intercampus transfers within systems, except those involving the Health Science Center, were permitted; and budget levels for faculty compensation, capital outlay, operating expense and other expenditure categories became the prerogative of the boards. Faculty and selected administrative FTE limits were continued but at 100 percent of state formula instead of the previous policy of 98 percent, effectively providing room for staffing expansion if so desired by the boards.

2. **Enrollment setting policy** was not changed. In general, except for the previously existent state enrollment limits at CU-Boulder and Colorado State University, enrollment levels continue to be demand based and defined by institutional policy regarding academic admissions standards (however, the enrollment caps for CU-Boulder and Colorado State University were changed to apply only to residents, thereby uncapping nonresident enrollment). Supplementals, both positive and negative, are given based on variances in anticipated enrollment levels.

3. **Incentives for nonstate revenue generation** were created by this agreement. Previously any revenues in excess of targets had to be returned to the state treasury. These included added funds from tuition, indirect cost recoveries, and other cash funds. With the new agreement, institutions could retain these funds and roll them forward into ensuing budgets. This change is one of the key incentive features of the MOU.

4. **Pricing authority** was given to the boards. Previously, tuition, student fees, hospital charges, room and board fees, etc. were set by the legislature, primarily on a cost-based procedure. The agreement gave authority in these areas to the boards.

5. **Special requests** were in effect eliminated by this agree-

ment. After the initial year of operation, utility supplementals were eliminated, and other separate special requests were placed outside the legislative agenda. Except for capital construction funding, which is continued as a separate item, all other requests have been placed outside the higher education appropriation process.

Consequences of Flexibility

The memorandum of understanding designating flexibility was sought after and continues to be generally enthusiastically supported by the public institutional boards. The decision-making discretion afforded by this Agreement and the set of management incentives it created are considered key supports in the institution's efforts to improve (it should be noted however that there is some board discontent tied to the narrowing of the negotiating agenda with the legislature and the removal of the capacity to strike independent accords with the legislature). In sum, the major effects of these changes include (1) an enlargement of the resource base at the university, (2) the implementation of differentiated pricing policies that reflect a wider range of institutional objectives (academic, access, market, competitive) than were accommodated by the singular cost focus of the legislature, (3) reallocation of resources to areas of higher need and priority, (4) development of fund pools for unexpected contingencies and to support innovation and program enhancement, (5) incentives for management efficiency, and (6) greater involvement and assumption of responsibility by operating managers. An elaboration on these changes follows:

1. Enlargement of the Resource Base

Although initially the legislature provided a significant boost in state support to higher education, the major focus of attention with flexibility is in making changes in levels of nonstate funding. This presumes a continuing and adequate degree of support from the legislature, a point of obvious keen interest for the institutions. Nevertheless, the objective with flexibility is to enlarge other sources of funding. Flexibility has clearly led to an increase in total funds available to higher education. The removal of the requirement to return "excess" or unanticipated additions to tuition revenues and other cash sources represents one source of added support. Before the flexibility agreement, the university returned about 3 percent of its state appropriations or approximately $3 million to the

state at year end because historically the institution has overachieved on tuition and other cash fund targets set by the legislature as part of the original budget.

In the first year of flexibility, additions to gift funds doubled over the preceding year, in part due to greater recognition by donors that gift funds would not be replacing state funds.

A series of incentives described below for changes to pricing policy and for greater management efficiencies also contributes to an expanded base of funds. For example, the application of tuition differentials has netted an additional 1-2 percent of tuition revenues to the base. Improvements in cash management, in purchasing/inventory control, and the reduction of receivables have similarly increased the base. For example, the acceleration of tuition collections netted approximately $400,000 at the university in added interest income. In addition, earlier tuition collections had a side benefit of reducing uncollectibles from an original level of 1 percent to its current rate of .45 percent, for a combined benefit of over $1 million additional funds annually in this one area.

2. **Differential Pricing Policies**

The authority to set prices (for tuition, hospital charges, etc.) has led to a major shift in pricing philosophy at the university. For example, under legislative prerogative, tuition was determined as a set fraction of cost (25 percent). Although cost is a continuing consideration, other factors now influence the level of tuition charged at the university, including access goals for state residents, academic objectives (reflected in price differences to influence course load patterns and to encourage certain student pools), demographic trends and other market considerations, competitive charges at other institutions and articulation of related intercampus pricing policies within the university.

The effect of these changes in philosophy has been a much more differentiated tuition schedule than previously existed, and tuition increases have varied across different categories of students. For example, nonresident graduate students now pay **less** in tuition than nonresident undergraduates because of differences in student demand and price elasticities.

Graduate resident students are experiencing larger price increases because of the favorable competitive posture. For academic and cost reasons, the per credit hour charges are changing. Law students now pay a differential surcharge. Other differentials are being explored, e.g., for lower division/upper division, other program differentials, summer school variances, and alternative tuition collection plans.

Pricing policy at the university hospital has also shifted, involving a differential price schedule and a greater effort to manage patient mix.

3. **Reallocation of Resources**

With the capacity to allocate resources across line items, the university has been able to redirect monies to their highest priority use. This authority has resulted in a greater relative allocation of support to faculty compensation, capital outlay, library, travel, and operating expense and away from support staff and utilities. These trends are, at this point, just occurring at the margin but are anticipated to be enlarged over time. They in effect correct an imbalance created by past allocation mandates established by the legislature.

The university operates within a state personnel system for the bulk of its staff (excluding top level administrators and faculty) with wages prescribed by law on the basis of an external salary survey. Since the university does not control the level of pay for these staff its only means of expenditure control is the amount of FTE employed in this area. Efforts to encourage voluntary furloughs and leaves, reduced appointments from twelve to nine months, and down-scaling in grades are underway to bring this category of expenditure more in line with patterns elsewhere and with university priorities.

In addition, with budget flexibility the university is in a better position to make policy commitments that have multi-year impacts. An example of this is the recent overhaul of tenure policies at the university. The university has developed a set of proposals for Regent approval that permits the release of tenured faculty in cases of program discontinuance. A financial feature of that agreement is a schedule of severance payments that can be entered into much more confidently under the flexibility agreement.

4. **Development of Contingency Funds**

As part of sound fiscal management, the university has adopted a conservative budget-setting process that is based on (1) conservative revenue estimates and associated expenditure budgets, (2) the creation of reserves of approximately 1 percent of budget, and (3) other contingency funds for the president and chancellors derived from interest earnings and other accounts [i.e., revenues above projections generally accrue 80 percent to the campus and 20 percent to the president, with the campus share generally being split 80 percent to the generating unit and 20 percent to the campus chief executive officer (chancellor)].

These funds provide an important buffer against revenue shortfalls and unanticipated expenditure overages (e.g., unusual increases in utilities costs, etc.). For example, a recent state revenue shortfall which resulted in a 2 percent cut in state general fund appropriations could be covered for the most part by these contingencies (though some program cuts were made). These funds provide an important smoothing device to protect against such fluctuations in revenues or expenditures.

More importantly, when not consumed by such contingencies, these funds provide a key resource for innovation and program enhancement. For example, such funds have been used at the university for **one-time** expenditures to support initial research efforts by young and promising tenure-track faculty, to reward excellent teaching through bonuses, to improve capital outlay support, to provide computer resources for faculty, and to stimulate further research in selected disciplines, such as the humanities foundation now being established by the university.

5. **Management Efficiency**

Prior to the MOU, there was little incentive for the introduction of practices that enhanced efficiency but involved the expenditure of resources to implement. Under the prior arrangement, such expenditures would have replaced the operating needs of the university and the added income would return to the state. Under the flexibility agreement, these incentives now exist. Whereas the requirement to return

"excess" cash to the state treasury provided clear incentives to build inventories, current interest earnings on cash provide the opposite incentive — leading to an improved management of purchasing and inventory control. Similarly, the cash incentives from greater interest earnings accruing from earlier tuition collection led to the acceleration of collections. Faculty and other unit managers now face clear incentives to save monies in one area and devote them to other uses. So for example, nine-month versus twelve-month secretarial support may be preferred if such funds can be used to purchase needed capital equipment.

6. **Responsibilities of Operating Managers**

One of the key benefits of flexibility is that once it is fully in place it provides incentives at the operating level to control staffing, save funds, and reallocate resources according to unit needs. Since any centralized definition of these needs is likely to vary due to the special circumstances of a unit, the capacity to reallocate makes flexibility a reality at the local level. Similarly, with the opportunity to manage resource allocation, local managers also carry the responsibility to meet budgets. Both reserve funds or deficits can and are carried over if a unit saves (overspends) its budget — thereby ensuring unit accountability. It should be noted however that the foregoing "theory" of flexibility takes time to materialize. Many operating managers schooled in the prior system have been slow to adjust. Until trust and confidence in the new system can be developed, there is a reluctance by some to embrace these changes.

Needs for Revisions

Although there is widespread support for these changes in the relationships between higher education and the legislature, the need for selected changes in this agreement has been indicated.

— **Inclusion in the State Personnel System**

One of the key areas of concern stems from the inclusion of the bulk of staff (non-faculty and non top-administrative) within the state personnel system. The inclusion of these staff in this system has removed key elements of flexibility from the university, associated with pay scales, appointment

terms, and the capacity to mandate selected furloughs, leaves, etc.

— **Inclusion in the State Purchasing System**

In many areas of purchasing, the university could more efficiently and less expensively acquire materials outside this system.

— **Reexamine Adequacy of State Support**

The level of state support was initially established at the existing per **resident** student average, with subsequent adjustments for inflation (as determined by the state's capacity to meet these price changes) and enrollment growth. As currently operating, the institutions face tremendous incentives to offer low-cost, high-volume instruction since such changes do not affect the level of state support. Some adjustment is needed to redress these incentives and thereby insure that state needs are met, whatever their cost.

— **Average Versus Marginal Funding**

Enrollment increases or decreases result in support changes based an average FTE student allocations rather than marginal increments (decrements). The disadvantages of such funding strategies, particularly to institutions which are losing enrollment, have been widely discussed in the higher education community.

— **Addressing Special Needs**

The MOU explicitly excluded the option of special requests, with the exception of capital construction projects which continue to be considered outside the MOU and on an individual basis by the legislature (since the state has a 7 percent statutory limit on spending, both the operating budget and capital construction budgets must be financed within this limit). Although some such needs can probably be accommodated through the reallocations permitted by flexibility, some needs may be too large to successfully address and yet too important to ignore.

Politically Sensitive Issues

The State's posture on tuition setting is one area of sensitivity. The delegation of tuition-setting authority to the institutions has been a source of subsequent legislative concern. Tuition operates as the key incentive lever for greater state appropriations, with the institutions explicitly identifying larger tuition increases as the tradeoff when state appropriation increases of a specific level are not forthcoming. Some legislators feel that tuition increases have been too great. Because tuition setting has a wide range of consequences for the institutions — academic, fiscal, market, etc., a return of this authority to the state would be a major loss.

A second area of sensitivity relates to the disposition of the legislature to ignore important cost developments in establishing the level of state support, thereby raising the general issue of the "quid pro quo" for flexibility. A prominent example in this context is classified staff salaries, a cost item that is established by state statute and outside the purview of institutional decision-making. The willingness of the legislature to recognize this cost component and to reflect it in changes in state appropriations is a key area of institutional concern. Utilities charges are another area that falls generally into this category as well.

A third area of sensitivity is that confronted by the university in its role as resource allocator among the campuses within the system. The responsibility for budget decisions related to faculty salaries, tuition levels, and intercampus allocation of funds now clearly resides with the university's Board of Regents and its chief administrative officers. The intercampus issues have been highly charged to date and continue to present difficult management issues as two developing campuses attempt to make claims against funds at the more established campuses.

A final area of vulnerability relates to the united posture of higher education institutions both in support of higher education positions and the successful carrying out of the responsibilities for balanced budgets. To date, this posture has been intact. If enrollment shortfalls are part cularly difficult at a set of institutions or if management practices do not show fiscal returns, this balance may be undercut.

Quality and Budget Flexibility

Campbell and Hyatt,using concepts identified by M.D. George,

have identified five views of "quality" in higher education: mystical or unspecifiable, based on reputation, dependent on program inputs, associated with institutional processes, and finally as represented in end products (Campbell and Hyatt, 1982; George, 1982). Each of these definitions can be employed in the context of assessing the relationship between the introduction of budget flexibility and improvements in quality at the University of Colorado. The clearest relationships however are in the program input and institutional process areas. Hopefully over time, improvements in the area of reputation and products can be more clearly identified. At this time, the following quality improvements are singled out.

1. **Program Inputs**

   A key impact of the financial flexibility at the university has been, through the introduction of new incentives, an increase in the amount of nonstate funds collected by the university. These funds have provided a smoothing device to cushion the impact of unexpected downturns in any revenue or expense categories, an improved basis for multi-year planning in the academic and other programs at the university, and most importantly when contingencies have not consumed these funds, a basis for program innovation.

   Another series of changes related to program inputs are associated with the capacity of unit managers to alter existing resource allocation patterns in line with their perception of priorities and needs. To date, this flexibility has resulted in a greater allocation of funds to faculty compensation, operating expense, and capital outlay and away from staff compensation and utilities.

2. **Process Changes**

   With the advent of budget flexibility, the capacity of university members to reallocate resources was changed dramatically. The morale effects of being able to determine the priority for uses of budget funds within one's purview are substantial. Such responsibility contributes to both the sense of opportunity and accountability for these managers (which include department chairs and faculty).

3. **Product Changes**

End use quality changes can be claimed in the areas of more effective teaching (through incentives/awards to faculty), more research conducted particularly among junior faculty and those in the humanities, and improved capacity of faculty and students to utilize computer technology and other state-of-the-art equipment in their endeavors.

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CHAPTER 20

State Policy Options for Financing Higher Education

Norman M. Fischer

This paper explores some of the alternatives for financing higher education within the context of the state of Washington, its traditions, and recent trends. The options are reviewed within a continuum from high state control to high institutional flexibility.

A. The State Agency Model

Under the "state agency model," an institution of higher education would be treated no differently than any other department of state government. This model is usually typified by centralized

Dr. Norman M. Fischer is Associate Coordinator for Financial Analysis, Washington Council for Postsecondary Education.

control. Since legislatures have limited time for ongoing oversight, it is usually associated with a centralized governing authority or direct executive control.

1. Major Features

(a) Financing

- All funds including auxiliary enterprises receipts, services and activities fees, patient fee income, and federal research grants and contracts would be deposited in the general fund and subject to appropriation control.

- All student fees and charges would be prescribed by the Legislature or subject to specific executive or legislative oversight.

- Institutional building accounts would be eliminated.

- All expenditures would be subject to legislative appropriation and allotment control. The spending level for operations would, therefore, be established by the Legislature upon recommendation by the Governor.

- The state general fund would be the ultimate funding source for all operations with the exception of federally sponsored grant and contract research activity and auxiliary services. Financial responsibility for higher education operations would be vested solely in state government.

(b) Budgeting

- The institutional budget request would reflect a spending plan at a detailed level keyed to clearly set forth objectives.

- Specific detailed workload factors would serve as the basis for the level of the institutional request.

- Formulas might be used for similar functions within an institution such as instructional departments. However, specific support services probably would receive individual scrutiny and possible revision in the budget review process.

- Executive and legislative attention would be keyed to the components of institutional operations, and among institutions, relative efficiency would be a major criterion.

- The Legislature would approve the spending level for the various programs, major activities, and the objects of expenditure within those programs and activities. Adherence would be expected unless conditions changed.

(c) Accountability

- Institutions would be responsible for expending funds in the manner appropriated and justifying any deviations in terms of changed conditions from the time the funds were appropriated.

- Institutions would be expected to file detailed expenditure plans by program, major activity, and object of expenditure and fund source by month.

- Funds remaining unexpended at the end of any fiscal quarter would be returned to the general fund unless justification could be given that conditions had changed significantly to allow rescheduling of those funds over the remaining fiscal quarters.

- Oversight would be exercised over changes which might have a long-term fiscal impact, e.g., salary increases, promotion, acceptance of grants.

- Major elements of institutional operations would probably flow through state government, e.g., purchasing, personnel, engineering services.

- Certain institutional activities might be standardized and established in statute law. These could include faculty classroom contact hours, sabbatical leave practices, tenure criteria.

- The major focus of oversight would be directed at process considerations and relatively little attention would be given to the effectiveness of the services provided.

B. The "Current Model"

The current relationship between the state and institutions of higher education in Washington is not unlike many aspects of the "state agency model," particularly in terms of accountability. More flexibility is provided in budgeting, and there is a greater sense of shared responsibility for financing.

1. Major Features

(a) Financing

- All operating fee collections are deposited into the state general fund, similar to general tax revenue, and are not used as offsets to the institutions' biennial appropriations.
- The rates for most student tuition and fees are set formally by the individual governing boards but are prescribed by the Legislature.
- Services and activities fees, auxiliary enterprise revenues, patient fee income, and other fee income are retained locally and are treated as "nonbudgeted" funds.
- Grant and contract research funds are retained locally and are not appropriated but are subject to allotment control.
- The state general funds have been appropriated for 1981-83 in lump sum amounts by institution and to the State Board for Community College Education in total (recent practice, however, had been a series of line items by program).
- State government is primarily responsible for financing higher education operations.

(b) Budgeting

- Formulas are used to determine roughly 50 to 60 percent of an institution's state appropriation. The remainder of the state funding is determined on an incremental basis.
- "Input elements" of the formulas, such as enrollment, unit price of books, square footage of buildings, etc., are subject to review and modification.
- A "percentage of formula" approach is used as the basis of appropriations for activities covered by formulas.
- Detailed budget requests are prepared by institutions* although major funding decisions are primarily based on enrollment and formula levels.

* Present prescribed formats create a substantial institutional burden. The 1981-83 request of the University of Washington contained 665 pages.

- "Indirect cost" revenues are budgeted on a predetermined shared basis between the state and the institution.

- The funding formulas are often perceived by the Legislature as spending plans rather than funding vehicles.

(c) Accountability

- All "budgeted" expenditures, regardless of fund source, are subject to allotment control.

- Institutions are required to submit by month their expenditure plans by program, major activity, by object, and fund source even though the appropriations were made in a lump sum amount.

- State funds remaining unexpended at the end of each fiscal year are to be returned to the general fund unless certain extenuating circumstances exist. State law requires institutional revenues to be expended prior to state funds, thereby limiting carry forward local fund balances.

- Accountability controls are shifting from dollar controls to FTE staffing controls. This shift toward controlling employment both reduces institutional flexibility in its use of appropriations and indirectly controls expenditures of state funds.

- Several aspects of institutional operation are controlled by law or rules of other agencies, e.g., sabbatical leaves, classified personnel, community college collective bargaining, tuition and fee waivers, etc.

- The major focus of oversight has tended to be directed at process considerations, and relatively little attention has been given to the effectiveness of the services provided.

(d) Possible Improvements

There are several improvements which could be made within the context of the "current model." Possible steps include

- A more generalized formula approach either within the context of each formula program or covering several programs.

- A base level guarantee of funding with enrollment fluctuations treated on a marginal basis.

- Additional management incentives through a sharing of year-end savings.

- Increased flexibility through return of operating fee income to local fund status and full or partial discretion of governing boards in adjustment of fee rates.

- Less detailed allotment controls, probably on an annual basis.

- Substitution of program effectiveness accountability for detailed process accountability while monitoring normal fiduciary responsibility and accountability.

- Evaluation of state-level and statutory controls to determine their effect on institutional efficiency and effectiveness.

C. The "State Related" or "Colorado" Model

A new system adopted last year in Colorado is representative of an approach used for some institutions, particularly major research universities, in several states. Under the "Colorado Model," an institution of higher education would be a "state-aided" institution. While it would continue to remain a "publicly controlled" institution, it would assume greater responsibility for operation. Decentralized control and governance would be a feature of this approach. A key element of this approach is that the scope of the state's financial responsibility is limited to the extent of state appropriations, not the entire budget, and institutional actions do not affect the extent of that level of commitment except in specific cases either set forth in a memorandum of understanding or clearly understood by the institutions and state government.

1. Major Features

(a) Financing

- All funds raised by the institution would be retained locally and would not be subject to appropriation controls.

- Tuition and fees and other student fees and charges for services would be set by institutional governing boards, possibly within

a policy framework established by the Legislature or its designee.

- Institutional building accounts could retain their restricted treasury status or be returned to the institutions as local funds.

- Community college districts could be granted local taxing authority to support activities not funded by state appropriations.

- Only state general funds would be subject to state appropriation.

- Financial responsibility for higher education would be shared by the state and the institution.

(b) Budgeting

- Budgeting for most campus operations would be based on a dollar amount per FTE resident student adjusted for inflation or a broad based aggregate formula approach.

- Salary adjustment funds would be appropriated directly to boards, either separately or as part of the basic appropriation.

- Budget requests would be keyed to the basis of appropriations and contain less expenditure detail. A greater proportional emphasis on plans and objectives would be reflected in the requests.

In the Colorado memorandum of understanding, certain criteria and limitations have been established. These are set forth below to give a better understanding of the operation of that system.

- The base dollar per FTE student for each group of institutions under a governing board in Colorado was originally determined by the 1980-81 appropriation levels divided by the number of FTE resident students.

- Enrollment targets have been set with a "tolerance band" (plus or minus 2 percent) at the two major universities, and general fund support is reduced if that band is exceeded or under realized. All other schools get "positive or negative" supplemental appropriations for resident enrollment deviations.

- The governing boards are responsible for the first plus or minus 12.5 percent of utility cost variation.

- Limitations have been imposed on the total number of FTE faculty and the maximum number of FTE staff in institutional administration.

- The memorandum provides that no request for special purpose items will be submitted.

- Capital construction over $100,000 regardless of funding must be approved by the Legislature.

- Health sciences and agricultural research and extension are still budgeted in the traditional manner.

(c) Accountability

- Under the "state-related" model, accountability would be focused in two ways: Fiduciary accountability for state tax funds appropriated, through periodic audits and ultimate financial responsibility for errors, and program accountability through adherence to approved program plans and accomplishment of objectives on which budget planning was based and communicated to state government. The following examples of "state-related" accountability are contained in the "Colorado" model.

- Communications appears to be a key to the Colorado model. Quoting from the memorandum of understanding,

> This agreement represents a good faith effort to enumerate the details of the assumptions and conditions on the state appropriations for the pertinent higher education entities. No further restrictions are implied; however, the governing boards assume responsibility for notifying the joint budget committee, the education committees of the General Assembly, and the Colorado Commission on Higher Education of any and all significant departures from previous methods of generating or allocating funds.

- Under the Colorado model there is no specific allotment control. Equal monthly cash transfers are made from the state treasury.

- The memorandum of understanding provides that institutional records must be auditable.

- Local fund balances carry forward and do not affect the extent of state appropriations.

- The memorandum of understanding sets forth certain reporting requirements. A copy of the memorandum of understanding is available upon request.

Perhaps the most significant feature of the Colorado approach to the "state-related" model is that institutional management decisions do not have an effect on the level of state appropriation with certain clear exceptions. If an institution chooses to implement a new program, the funding has to come from its own resources and not from a supplemental state appropriation. With the limits of responsibility spelled out in advance, the level of accountability can be raised to one concerned more with policy and far less with the process. The key budgeting decision points are enrollment and the amount of the "inflation adjustment." The latter factor is not necessarily keyed to any external index but reflects a policy decision on the part of the Legislature as to the extent of cost increases which will be supported by state appropriations.

D. The Corporate or "Free Market" Model

Under the corporate model, each institution of higher education would be granted independent status as a non-profit institution with opportunities to provide postsecondary education services through specific degree levels currently in existence, e.g., University of Washington through the doctorate. Institutions would be chartered to perform specific public service and research functions consistent with their current role and mission. Within these broad guidelines, institutions would have complete freedom of action. The state's interest in terms of providing educational opportunites for state residents would be maintained through a system of contracting with institutions of higher education for state subsidized student "spaces" and specific research and public service activities.

1. Major Features

(a) Financing

- Institutions of higher education would have total control of all funds.
- Tuition and fees and all other fees and charges for services would be set by independent institutional governing boards.
- Institutions would assume responsibility for new capital construction while the state would continue to be responsible for the liquidation of existing bonded debt.
- State appropriations would be made to a third party state agency for the purpose of contracting with institutions of higher education for particular services and enrollment opportunities.
- Ultimate financial responsibility for higher education operation would be vested in the corporate institutions.

(b) Budgeting

- Contract amounts per student at various levels would be determined based upon an external index. In the area of student enrollment, the basic budget decisions would concern the number of student "spaces" to be purchased. Under this type of approach a substantial investment in student financial aid also would need to be made.
- Decisions on research and public service contracts as well as guidelines for allocation of contract student spaces would be keyed to past performance.

(c) Accountability

- Institutional records would have to be auditable and their accounts meet generally accepted accounting procedures.
- Effectiveness accountability provisions would be included in the contracting mechanism as criteria for satisfactory performance.

Note: Excerpts from report entitled: "State Policy Options for Financing Higher Education and Related Accountability Objectives".

PART IX

PUBLIC - PRIVATE COMPETITION

CHAPTER 21

The Vital Role of the Private Sector

Morgan Odell

In an era of retrenchment, should the type and amount of state support to independent colleges and universities by changed? This is the question for debate.

The question involves both type and amount of support and forty-nine different states. Forced to respond "yes" or "no," I would say "yes, changes should be made" but then quickly add that in my opinion both type and amount of support have been effective in a good number of states in recent years.

My main concern is that support programs that have been effective remain so in the coming years and that good programs be developed in states where they do not exist. These were difficult objectives even when state tax dollars were relatively abundant. In an era of retrenchment these goals will require important changes in the way we think about and utilize available higher education resources.

Independent colleges and universities are well valued by leaders in education, business, politics, and the community. But, while the

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Dr. Morgan Odell is Executive Director, National Association of Independent California Colleges and Universities.

value of the independent sector is broadly recognized, there is much less understanding of the factors that enable independent institutions to function effectively.

The ability of a college to attract and retain students stems from many elements — some rather subjective — including the perceived ambiance of the campus, the talents of its faculty, the employability of its graduates. Other elements are more quantifiable, like the amount of the college tuition and the gap between its tuition and that of the state university. Even though these items can be measured in dollars, there is no formula, no model, to assess their influence on attendance. Financial aid — federal, state, and local — presents a similar problem. There is no yardstick for determining with any exactness its effect on independent college enrollment. Intuition and observation are the only real guides.

In earlier years the unknowns concerning tuition prices, subsidies, and student aid were not a serious problem for the independent sector. Throughout the 1970s most independent colleges and universities were able to raise tuition charges to match inflation increases and to obtain enough student-aid funds to maintain their share of enrollment. In fact, the percentage of college students enrolled in independent institutions was quite stable through the 1970s. Moreover, the family income distribution and ethnic mix of students at independent institutions apparently remained constant from 1975 to 1981.

Enrollment Changes

Fall 1982, however, brought significant changes in enrollment patterns. Nationally, total enrollment declined in the independent sector while it climbed slightly in state universities. The sector suffered a 4 percent loss in full-time freshmen and apparently a sharp drop in students from lower income and minority families, a group that the independents have served with special effectiveness. Last fall many of these students seemingly concluded that they could not afford an independent college and opted for a lower priced state university. A current survey of 35 California independent colleges and universities shows that while the tuition of these institutions increased by an average of 14 percent between fall 1981 and fall 1982 there was an astonishing 5 percent drop in the number of their undergraduate students who qualified for financial aid, even though there had been no change in need criteria and virtually no change in total enrollment.

Independent sector people think they know the reasons for these losses, but the data are not hard enough to satisfy anyone who would be persuaded only by detailed, comprehensive analysis. The fact is there exists no formal methodology for analyzing inte institution or intersector enrollment shifts. Intersector shifts would seem to be logical subjects of study for state 1202 commissions, but to my knowledge none is contemplated by any state or federal agency.

It seems obvious to some persons that individual states should be acting now to prevent the enrollment shifts of fall 1982 from becoming trends, but the need for such action is not so obvious to others. The danger is that vital decision will be delayed because 1) the need for action cannot be proven, or 2) no analysis is available to show exactly what should be done, or 3) a decision will be made to conduct a lengthy study of alternative remedies before any one is tried. Meanwhile, state universities may capture the limited funds available for raising student subsidies by advancing the traditional argument that low tuition is essential in maintaining access to these institutions.

What research is there to back up this claim? Apparently almost none. Theoretical constructs developed by several investigators assert that each $100 increase in tuition will cause a predictable drop in enrollment. But recent experience in those states that have substantially increased state university tuition charges provides little validation for such theory. Further, these constructs focus on enrollment rather than access, which is the economic **ability** to attend — an ability that is independent of a student's decision to enroll.

What we are talking about here are subsidies provided by federal and state government, either directly or indirectly, to students in both independent and state colleges and universities.

No Cost Effectiveness Formula

Are you surprised to learn that no methodology exists for assessing the cost-effectiveness of these subsidies? In truth, there is no formal statistical analysis we can use to determine whether current state subsidies for students in either sector are either too high or too low. To my knowledge there has never been a study to determine what level of public university tuition achieves the best balance between provision of student opportunity and cost to the state.

Where can a guideline be found for deciding the size of state subsidies? Last spring we prepared briefing materials for California

gubernatorial candidates to review before they met with members of our Association Executive Committee. Here are two paragraphs from that material:

> One way of thinking about the value of independent colleges and universities to the people of California is to note that these institutions have been **competitive** with public universities — **competitive** in quality and in attracting students. Because of their competitiveness independent institutions have 1) provided a standard that has strengthened the educational programs and academic freedom of public universities, 2) allowed California students a wide and diverse range of educational opportunities and 3) brought from private sources each year many millions of dollars to the support of California higher education — money from students and parents willing to meet the high tuition charges of independent colleges and money from alumni and friends through gifts.
>
> Independent colleges and universities must be competitive if they are to serve Californians as they have in the past. Indeed, they must be competitive in order to survive.

So, the concept of competitiveness gives us a basis for determining the distribution of state subsidies. Also, we see that the question posed in this debate cannot be answered by looking only at independent institutions. Why? Because their fate will be decided not only by their own actions but also by the quality and the tuition costs of the state universities and by the funds available from federal and state student-aid programs.

Utilization of Statewide Resources

Across the country a good deal of attention has been given to resource use, mostly when an institution is forced to live within last year's budget, or nearly so. Campus decisions are then made about what programs to cut back and what positions to leave unfilled. But only limited attention has been given to better utilization of statewide higher education resources including

1) the additional income that could be obtained from users of

state unversities whose families can afford to pay for a larger portion of the cost of their education and

2) the asset that many states have in their independent colleges and universities.

These two resources do not impact on the state budget in the same way. The first, raising public university student fees, helps the state budget immediately and thereafter. The second, making greater use of independent colleges by causing additional students to enroll in them, does little to help next year's state budget but produces significant state savings in both operating and capital funds within a few years. In light of both short- and long-term state fiscal forecasts each avenue should be pursued.

Fortunately, the absence of formulas and models need not impede action. Seat-of-the-pants decisions will do here, because it appears the financial condition of most states calls for decisive, not drastic action, and because the action that seems most appropriate for higher education can be corrected in mid-course.

The plan I propose is based on the concept of competitiveness. It is not original with me, or with authors David Breneman and Chester Finn, but was the program they recommended following the study and research that went into their 1978 Brookings Institution book, *Public Policy and Private Higher Education*. Breneman and Finn call for tuition rates on public campuses to be raised and for states to allocate additional funds for need-based student aid that would be available to both state university and independent sector students. "The rationale for this (plan is) that it would, first, narrow the tuition gap, second, improve the efficiency of the postsecondary marketplace, and third, provide public subsidies for those in most need" (Breneman and Finn, 1978, p. 48).

This is not a radical proposal — the basic machinery already exists in most states. It is a matter of using it more effectively. Breneman and Finn would increase both tuition and student aid incrementally and check regularly to assure that student access was not lost and that independent sector institutions remained competitive. This program could put higher education in a proactive role in the state budget-making process with these possible results:

1) more funding per student for state universities than would otherwise obtain,

2) more control by state universities of their own funds, and

3) more likelihood of maintaining the quality of higher education.

> Over time, an equilibrium might be reached in which states provide a substantial, but lower, percentage of public-sector institutional support, public tuition is higher but still (substantially) below private tuition, and a greater percentage of state aid flows through need-based grants to students. . . . Meanwhile, student choice among colleges will have been enhanced, the higher education marketplace will have become a more reliable guide to resource allocation, and those private colleges that compete successfully for students will have received public aid in a manner that minimizes the threat to their autonomy (Breneman and Finn, 1978, p. 432).

State university officers who would seek to capture some of the state funds now going to the independent sector might justify this move by asserting that independent colleges could get along about as well without such support. Perhaps several years ago a reduction in state funds might have had little effect, but times have changed. Federal student-aid cutbacks have had a disproportionate impact on independent college students. Cited earlier were the 4 percent plus drop in independent sector entering freshmen and an apparently larger loss of low-income students. The evidence is clear: student-aid cuts mean loss of enrollment in independent colleges.

Self-help Requirements

To support the point, consider the level of self-help required this year of freshmen students in independent colleges in California. For students with work and loans the **average** requirement in summer savings is $889, term-time work $1,110, loan $1,707, for a total of $3,706. And, the **average** total requirement for upper-division students is over $4,000. Self-help at these levels has pushed our colleges to and beyond the bounds of competitiveness.

What about the public university official who is not opposed to independent higher education but who sees a desperate need for funds in his own institution? This is not an easy person to persuade that

state grants should continue to allow students to attend an independent college. But while cutting back aid funds to independent college students might give this public university official a little more money in next year's budget, it might also produce a significant increase in the institution's enrollment, made up of students no longer able to afford an independent college. The possible result for the public university — fewer dollars per student than it had before it obtained the additional funding.

In contrast to today, 1978 may be remembered as a marvelously bountiful time in history. But even then Breneman and Finn saw serious consequences for states that did not achieve an overall financing plan for higher education, a plan that would encompass both the state and independent sectors. They believed that without such action funding would become tight enough in many states to produce these possible consequences:

1) The independent sector bearing the brunt of retrenchment, with resultant loss of students, followed closely by a demise in educational quality and then a loss of even more students.

2) The quality of state universities diminishing, partly because they will have to assume much of the workload now carried by independent institutions without receiving a proportionate increase in funding, partly because they will no longer have to compete with independent institutions in attracting students and partly because they will have few strong independent institutions to cite as examples in presenting their own requests for state funds.

Some may argue that the plan presented here cannot work because state university students are unable to pay higher fees. Obviously some cannot, and for them raised fees must be accompanied by expanded student aid. But there is ample reason to believe that many state university students could afford to and would pay substantially more. Consider these points:

1) Among state university systems which have boosted tuition charges in recent years little or no decline in enrollment is reported.

2) Independent colleges have much higher tuition than state universities but with sufficient student-aid funds have enrolled a high percentage of low-income and minority students.

3) The California self-help figures cited earlier show that many students are able and willing to make large contributions toward their own educational costs. A doubling of current state university tuition levels would still impose only a relatively moderate average self-help requirement on affected students.

4) A 1980 California survey showed average parental income of dependent undergraduates to be $29,300 at the University of California, $25,600 at independent institutions, and $24,300 at the State University. Above the $48,000 parental-income level were 21.5 percent of students at UC, 19.4 percent at independent colleges, and 12.5 percent at the State University. The California figures may not be typical of the nation, but it is likely that parental income levels for undergraduate students in major public universities match or exceed those of independent college students in many states.

Conclusion

The question of the debate may be restated in this way: "In an era of retrenchment what should be done about state support of independent colleges and universities?"

My answer is that this support should be

1) firmed up;

2) recognized as a student subsidy similar to the indirect subsidy provided to state university students through institutional allocations; and

3) made an instrument of state policy, along with the subsidy for state university students, to enable independent institutions to be competitive with state universities in the recruitment and retention of students.

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PART X

STATE LEVEL FORMULAS AND CHALLENGES OF THE 80s

CHAPTER 22

Recent Financing Developments in the Fifty States

Larry L. Leslie

I am reporting on the first half of a study to examine the relationship between enrollments and state funding of higher education. The study emanated from an hypothesis that the enrollment/funding connection is breaking down. This issue may be a crucial one for many institutions. One reason is that institutions often act as though the financial problems they will face in the 1980s and 90s will be solved if they can enroll more students. Conversely, many feel they are doomed if their enrollments fall. Both of these may be bad judgments.

In the process of conducting Phase I, we necessarily learned a good deal about higher education financing developments in the fifty states. In this first of two phases we interviewed those persons identified as the fifty higher education finance officers or their surrogates. The interviews took place in October-November, 1982. Usually, those interviewed were the finance officers; in a very few cases we interviewed a state higher education executive officer and in even fewer cases, another designee. The data on which I am going to report reflect neither the views of anyone but those interviewed (e.g.,

Dr. Larry L. Leslie is Director and Professor, Center for the Study of Higher Education, University of Arizona.

institutional finance officers) nor have they yet been validated by those interviewed. In other words, results are preliminary. We expect significant changes.

In Phase two we will examine the actual, as opposed to perceived, changes in the enrollment/funding relationship. In other words we will mathematically juxtapose enrollments and state financing over time, whereas this first phase yields perceptions of informed observers. In Phase two we will split our sample in general ways; for example, we will consider growing and declining institutions separately.

I have organized my presentation into two parts. In the first part, I report the findings descriptively, making interpretations as appropriate. In the second part, I make several generalizations that I think are important to understanding developing trends in state financing of higher education. Incidentally, some of these changes are, I think, of signal importance to American higher education.

Weakening of the Enrollment Factor

We began by asking whether the finance officer perceived a breaking down in the enrollment/state financing relationship. As seen in Table 1, thirty-one of those interviewed said they did perceive a breaking down, while five said the reverse: the relationship is getting stronger. Fourteen had observed no change. However, some of the thirty-one affirmative responses were negative answers changed to affirmative after reviewing the entire interview. In other words, the respondents sometimes failed to perceive that state actions were in fact reducing the dollar/enrollment connection.

Next we asked about emergence of concern about this topic (the dollar/enrollment relationship) in the legislature, executive branch, or higher education agency (see Table 1, item b). We asked about the status of state discussions on the issue in legislatures, governor's offices, etc. Discussions were reported on the enrollment/financing topic in forty-four states. In nineteen of those states the discussions were described as very serious discussions about which something would have to be done. On a one to ten scale — one indicating only passing discussion and ten indicating that something would have to be done — the mean response was 5.7. When asked whether these discussions had intensified recently, twenty-three responded affirmatively, and only one respondent said discussions had become less intense. In many of the other twenty states where discussions had occurred, discussions were described as remaining at an intense level.

Third, we asked for specification of state actions that have decreased or increased the enrollment/dollar relationship (see Table 1, item c). Interviewers indicated that exactly one-half or twenty-five of the fifty states had witnessed actions that would decrease the relationship, and seven states had witnessed actions that would increase the relationship. For example, in the first case some states reported changes in the formula to decouple enrollments from appropriations, while in the second case some states were changing their formulas to obtain a more direct relationship of dollars to enrollments.

Fourth, we asked a specific question: Has financing (usually formulas) been changed to protect institutions in which enrollments had or were expected to decline. Twenty-seven states have made such adjustments; two states report adjustments but to penalize not protect institutions; and the remainder report no action, usually because enrollment decline is not seen as an issue (Table 1, item d).

Fifth, we asked about state efforts to change financing structures to promote quality (Table 1, item e). Thirteen could identify changes in state financing regulations aimed at enhancing quality. In another four states quality concerns had been the object of changes, but the changes were not directly of a financial nature.

Innovations in Financing

Sixth, we asked a much more general question: What was new in state financing? In nineteen states respondents singled out formula changes; in fourteen states tuition increases were cited; in eleven states it was the appointment of a blue-ribbon commission or task force to examine state financing; and in nine states it was the implication of enrollment declines. In each of four states, student aid, student quality, and attention to the fixed cost-variable cost issue were cited (Table 1, item f). I should hasten to add that these were open-ended reactions; no checklist was provided. Thus, the actual numbers here undoubtedly are notably higher; that is, numbers surely would have been higher if checklists had been used.

Seventh, we asked why these changes have occurred (see Table 1, item g). Again no checklist was provided. The largest number, thirteen states, reported revenue shortfalls, and another nine states indicated simply "inadequate revenues." The essential difference here was that in the first case funding would have been higher, in the respondent's judgment, had it not been for the recession. In another seven states the response was "concern over funding;" in six states it was

"enrollment increases." Usually, the concern was how not to fund these increases. Other responses concerned student quality, reducing political logrolling, increasing outside support, and promoting greater institutional flexibility.

Our last question asked interviewees for their opinion of the thesis that the enrollment/state funding relationship was breaking down. Our results here were less than satisfactory because respondents were inclined to react only in terms of their own state conditions. In any case, fifteen of the interviewees strongly supported our hypothesis and seventeen did not, while the remainder were ambivalent.

In closing this first part, it is worth noting that the interviews allowed us to judge the overall status of state funding formulas (Table 1, item h). First, the oft-quoted statistic that about one-half of all states have formulas is supported. We found that twenty-six states now appropriate largely on the basis of a formula, and twenty-one clearly do not. However, in four of these twenty-one states, allocations are made from the state higher education agency to the institutions on a formula basis. The remaining three states use a formula minimally or in a quite limited fashion.

Some Generalizations

Allow me to turn now to the important generalizations. There do seem to be some important developments in state financing of higher education. If, indeed, the enrollment/funding relationship is breaking down — and that would seem to be the case — there is an important message here for colleges and universities. The notion that an institution can improve its financial situation through enrollment growth is becoming questionable and, conversely, so is the assumption that financial decline necessarily will go hand-in-hand with enrollment decline. This is *not* to say that enrollments are uncorrelated with state funding levels. Obviously, this relationship is strong. Rather, what can be said is that at the margin — in the case of enrollment growth or decline — in most states commensurate dollar increases and decreases for the most part do not come to pass.

In state after state we heard of state unwillingness to fund growth (e.g., Minnesota and Florida), of enrollment caps, of decoupled formulas, and of funding mission and programs but not numbers. On the other side, where enrollment decline had occurred somewhere in the state system (e.g., Kansas and Pennsylvania) we heard of "no

TABLE 1

1. Number of States in Which

   A. Enrollment/$ Relationship is Perceived to be

Breaking Down	31
Strengthening	5
No Change	14

   B. Discussions of the Enrollment/$ Relationship

Have Occurred	44	
Suggest Coming State Action	19	(X = 5.7)
Have Become Intensified	23	
Have Become Less Intense	1	
No Change	20	

   C. Efforts have been Directed at

Increasing the Relationship	7
Decreasing the Relationship	25

   D. Funding has been Changed to

Protect Declining Institutions	27
Penalize Declining Institutions	2

   E. Funding has been Changed to Promote Quality 13
   Other Changes have been made to Promote Quality 4

   F. New Financing Developments were

Formula Changes	19
Tuition Increases	14
Commission Appointed	11
Enrollment Declines	9
Student-Aid Changes	4
Student Quality Concerns	4
Fixed/Variable Costs	4

   G. Reasons for Financing Changes were

Revenue Shortfalls	13
Inadequate Revenues	9
Concern over Funding	7
Enrollment Increases	6

   H. A Formula is Used to Determine Appropriations 26
   A Formula is not Used to Determine Appropriations 21
   (A Formula is Used to Allocate from the State Agency) (4)
   A Formula is Minimally Used 3

fault" and "hold harmless" clauses; of formulas being changed so that "no institution will get less than it got last year;" of "enrollment corridors" in which no funds are lost even if enrollments decline moderately; and, where reductions did occur, of appropriation reductions of one-quarter to one-third of what would have occurred if there had been a strict connection between enrollments and dollars. In most of the growth states, legislatures are reported to be unwilling to add funds, often because "enrollment downturns are just around the corner" or because "we want to disengage our funding from numbers." In declining states, present or expected, there is recognition, implicit or explicit, of fixed costs and thus that resource needs will not decline significantly.

In many states it is difficult to ascertain whether these additional changes among legislators about funding enrollment growth and decline are due to severe state revenue declines related to the recession or whether the changes would have occurred anyhow. In most cases there seemed to be an interaction of the two, but it can be said safely that where state revenue shortfalls are major, all other factors take a back seat, i.e., enrollment changes are largely ignored. A corollary is that a sense of crisis in higher education finance is absent only where major revenue shortfalls are lacking. Yet, even where the situation is stable and concerns seem presently to be non-existent or slight, in many cases respondents concluded the interview by stating that change is on the way.

One major reason, according to the interviewees, is that higher education's share of state resources is declining. Clearly, higher education's priority in state finance is reduced in most if not all states.

In a number of states, perhaps about one-quarter, there is a sense of major changes in higher education finance. That is to say, there is a sense that a new financing order is in the wind. These states tend strongly, though not universally, to be where revenue shortfalls are the greatest. The change takes varying forms.

A Free Market Tone

For example, in a few states — Colorado for example — financing is taking on more of a free market tone. Tuitions are being raised dramatically for some students, and institutions are being given far more flexibility in how they raise and expend their revenues. The state attitude in such states may be summarized as *laissez faire*: "Here is a block (a relatively small block) of money. The rest is up to you."

A related approach is noted in states like New Jersey and South Dakota, where institutions officially are encouraged to raise new dollars from external sources, primarily gifts from foundations and research funds from corporations and the federal government.

More unusual innovations are noted in a few states such as West Virginia, which requires institutions to use certain tuition revenues for facilities repair and devote a portion of a "resource fee" to instruction. Further, the state has invoked a one cent soft drink tax, the proceeds of which are to go to medical education. One observer noted jokingly that dental education would be a more appropriate recipient.

Another development, new to me and noted primarily on the East Coast and in a few midwestern states such as Indiana, is attention to "high technology." Convinced that computers and related advanced technology will be key to these states' economic future, state governments are targeting new higher education resources on developments in this area. This is one of the very few areas where new dollars occasionally are available; in some states, such as South Carolina, funds are captured by closing old programs of low demand.

As always in higher education financing, changes are incremental. They are realized, generally, through modest incremental changes in existing formulas and other approaches not in revolutionary changes in financing systems. However, it is significant that the changes often are in a new direction.

When one views the entire fifty states, with some reflection upon where higher education finance has been and where it appears to be going, the impression gained is that events are cyclical. In the constant search for a better way, we gain ground on a new problem and lose ground to old ones. Today, there clearly is an effort to change formulas in order to get away from funding numbers. In so doing, we seek to place more emphasis upon qualitative factors, upon funding missions and programs, and upon using our good judgment. But it was an effort, perhaps a misguided one, to gain more objective financing methods and overcome political log-rolling that got us to formulas, and away from these now newer directions, in the first place. The poignant case of Massachusetts particularly struck me in this connection. While most states that are changing formulas are doing so in order to interject an element of qualified judgment to higher education finance, Massachusetts is embarking upon a formula approach to make the process more objective and less political.

An alternative view of all this would be that we are witnessing not a higher education finance cycle but rather selective adjustment, by which our methods constantly are being improved.

CHAPTER 23

Performance Funding in Higher Education: Panacea or Peril?

William H. Pickens

Traditionally, funding for instruction in higher education has relied on certain measures: student credit units, contact hours, faculty workload, or degrees conferred. Partly because of academic convention and partly because the alternatives seemed so subjective, funding formulas in higher education have usually been based on how much is done (credits and degrees) not how well it is done (changes in knowledge, enhanced lives, career development). Nevertheless, the philosophical justification for performance funding is persuasive in that institutions should receive some income for educational results not simply for activities.

The practical problems of performance funding are imposing. People disagree on standards of evaluation. Since effectiveness requires objectives against which performance is measured, the objectives must relate to institutional missions and to their clientele. Further, narrow definitions of performance may result in standardized measures which deaden the enterprise and lead to "teaching for the test." Finally, objective performance measures undoubtedly discount the numerous activities in higher education which, though not quantifiable, significantly enhance the quality of life (Lenning et al., 1977, pp. 6-7; Bogue, 1979, p. 23). Performance funding is a difficult business.

Dr. William H. Pickens is Director of Fiscal Analysis, California Postsecondary Education Commission.

Despite these traditions, the idea of performance funding has remained hauntingly attractive, especially to educators sensitive to the political demand for accountability. The following pages describe an experiment conducted in Tennessee — perhaps the most significant one in the nation — to test the feasibility of allocating some portion of state funds on a "performance" or "outcomes" basis. We can learn something from this experiment.

Performance Funding in Tennessee

Beginning in 1974, the Tennessee Higher Education Commission launched a $500,000 pilot effort, supported entirely by nonstate funds, called the Performance Funding Project. The project started with two assumptions:

- funding and educational performance should be linked;
- successful performance should not be judged solely by growth in the number of students (Tennessee Higher Education Commission, 1979, pp. 2-6).

Phase One: the Pilot Projects

The staff of the Tennessee Commission separated their planning into two phases. The first phase consisted of establishing the pilot projects and developing assessment measures which might serve later within the general funding formula. Initial discussions were intentionally wide ranging, favoring expansive ideas rather than closure. According to the Commission staff, there were those "who expected that the effort might yield a major alternative to enrollment-driven funding. Others may have expected the project to provide justification for more money to higher education or a means to soften the potential loss of funding support if enrollments were to decline" (1979, p. 41).

Gradually, the parties narrowed their discussions to measures that would complement, not replace, allocation based on enrollments. Since political support was essential if the performance measures were ever to be converted into dollars for the institutions, they had to be understandable and acceptable to state officials. On the one hand, legislators were particularly concerned that institutions not be in competition with each other. They favored a "value-added" criterion where performance would be evaluated in relation to the institution's own mission and its particular clientele.

On the other hand, the institutions were concerned that their autonomy be protected even as their accountability was, to some degree, increased. They feared that the data could be misinterpreted by state officials and that funds could be diverted from important purposes toward charades of high-powered evaluation. One widespread opinion was that the campuses were not receiving sufficient funds under the current formulas and that enhancing these allocations should have first priority. The staff of the Tennessee Commission was particularly skilled in balancing the conflicting interests.

In 1975, nineteen of Tennessee's twenty-one public institutions submitted proposals for the pilot projects. After evaluation, only eleven were selected to participate in the two-year "experiment." During the first year, the institutions developed the performance measures; during the second, they compiled data on those measures. In developing their measures, the institutions were to pay special attention to the following questions (Tennessee Higher Education Commission, 1979, p. 51):

- What was the institution's mission (the need to sharpen definitions)?
- What indicators best measured performance toward this mission (the need for measures congruent to the institution's mission)?
- Could these indicators
  - be objective and measurable (the need for uniformity)?
  - be comparable to similar institutions (the need for equity)?
  - permit longitudinal analysis (the need to measure change over time)?

So the responsibilities would be clear, the Commission negotiated a contract with the institutions in order to implement the pilots.

In 1977, each pilot campus reported its performance measures. Perhaps most striking was the variety of approaches: some developed institutional tests for students, some relied on national examinations, some worked with accrediting organizations, some emphasized questionnaires. The report by the Tennessee Technological University typifies the range of efforts:

> Tennessee Technological University [enrolls] approximately 6,500 FTE students [and has] a range of undergraduate and graduate programs, but with historic emphasis on science and engineering (in-

> cluding a doctoral program in engineering). Extensive faculty involvement was established through a program of "faculty associates," and 90% of the faculty participated in the goals identification exercise. Three categories of data — extra-institutional standardized tests, student and alumni surveys, and institutional activity data — were used to assess the performance of a representative sample of seniors on general education goals of communication, knowledge of history and social/behavioral science, understandings of science and technology, problem solving skills and preparation for further study. . . . Student performance was above national and state referent groups on the ACT College Outcomes Measures Project battery. Change scores for students on the ACT examination were also significant. Locally developed student and alumni surveys and other institutional data confirmed positive growth on goals. The university also has an ongoing evaluation of its teacher education program which was linked to this effort (Tennessee Higher Education Commission, 1979, p. 27).

Rather than establishing a single performance measure, the value of the pilots was their test of a process. Specifically, they tested

a. the willingness of campus personnel to involve themselves in performance assessment;

b. the ability of a campus to express its own educational uniqueness;

c. the ability of campus leaders to involve faculty and to elevate concern for performance assessment;

d. the benefits of performance data to the faculty; and

e. the potential for developing a partnership between the State and the institutions (p. 38).

Although the Tennessee Commission concluded that "not all projects achieved to the level desired" (p. 39) nor was the process wholly successful, the second phase was initiated in 1978.

Phase Two: Funding the Instructional Evaluation Schedule

This phase implemented the performance concept for **all** institutions by establishing it within the state's budget formulas. After the pilots, the Commission staff developed an Instructional Evaluation Schedule which, when completed by the institutions, provided a profile for funding. The Schedule contained five variables which, theoretically, permitted the evaluation to be sensitive to the diverse characteristics of the institutions (see Schedule A).

After each institution's total points were calculated by the commission staff or by an external evaluation team, these points were divided by 100 to establish the institution's percentage "rating." This rating was then multiplied by a dollar amount equal to 2 percent of the institution's projected Educational and General Budget, which was the highest possible amount available to fund the performance measures. For a sample of the results of this process for 1979-80 see Schedule B.

After publishing the results of the performance measures, the Commission staff recommended appropriations of $2 million out of a possible $4 million statewide, but the points awarded under the Schedule ranged from 0 to a high of 67 (Bogue, 1982, p. 39). Later, the staff asked the institutions to suggest improvements. Some criticisms were procedural: not enough consultation or too hurried a time for determining budgets. Some criticism involved the measures themselves: the need for more appropriate indicators for two-year colleges and graduate institutions. Some criticisms were substantive: the financial investment needed for the evaluation activities was far greater than the dollar return on the Instructional Evaluation Schedule. Bluntly, some suggested that the entire endeavor ironically drained resources "to evaluate quality when existing funding levels were not sufficient to produce quality in the first place" (Tennessee Higher Education Commission, 1979, p. 74).

Until 1982, the Commission changed the system little, preferring to gain experience over several years before rearranging things drastically. Then, in August 1982, the Commission's staff proposed different variables for the Instructional Evaluation Schedule for the Fall 1983. These new variables "are in the direction of greater objectivity, increased emphasis on the quality of the evaluation product rather than the evaluation process, and greater flexibility of application to the different types of institutions (Brown, 1982, p. 1).

Specifically, the new variables emphasize objective tests and placement of graduates and lessen the importance of evaluation by students, alumni, employers, or educational peers. Schedule C highlights these changes.

The Tennessee Experiment: A Critique

The formal features of Tennessee's experiment with performance funding are extremely sound. The Tennessee Commission developed its projects through a long and patient process which actively involved state officials, state educational staff, institutional administrators, faculty, independent advisory boards, and professional evaluators. This "Partnership Model" is crucial for the success of any enterprise which reaches directly into the educational process. The use of documents to focus planning and spark debate was a wise choice. The actual performance measures showed admirable variety and reflected a concern with the individual missions and circumstances of the campuses. Performance funding can serve to further stratify a state's institutions by insuring that "the rich get richer and the poor get poorer," and Tennessee tried hard to avoid this. In addition, funds provided under the Instructional Evaluation Schedule are additions to each institution's budget not amounts taken from them. The significant expense of documenting, refining, and applying the performance measures suggests that the state should be willing to accept it as a major component of the formula, one rewarding enough to justify the extra efforts of the institutions.

Is the Tennessee experiment a success so far? Narrowly, this can be answered by reference to the original objectives of the performance measures, as defined by state officials and educators:

a. to sharpen institutional mission,

b. to complement the enrollment-based formula,

c. to design an objective means of measuring educational outcomes,

d. to measure the educational "value-added" by each institution,

e. to promote institutional excellence without competition.

The record is mixed for achieving these objectives.

From all the reports and conferences on this project, it is safe to

SCHEDULE A

Tennessee's Instructional Evaluation Schedule
Used to Calculate Each Institution's Performance Funding Ratio, 1979-80

Performance Variable	Maximum Points	Method of Measurement
Proportion of Eligible Academic Programs Accredited	20	Institution has less than 75% of eligible programs accredited (0 points); 75-90% accredited (10 points); 90-99% accredited (15 points); All eligible programs accredited (20 points)
Performance of Graduates on a Measure of Specialized or Major Field Outcomes	20	Institution has assessed performance of a representative sampling of graduates in one or more of its major programs within last 3 years (5 points); assessed representative sampling in the majority of programs within 3 years (10 points); assessed performance of representative sampling of graduates within past three years and can demonstrate that the performance of its graduates equal or exceed performance of graduates from similar institutions in majority of these fields (12-20 points)
Performance of Graduates on a Measure of General Education Outcomes	20	Institution has assessed performance of a representative sampling of graduates on a pilot or one-time basis during last three years (5 points); on-going program to assess performance and has data available for more than one class during last 3 years (10 points); has assessed performance and can demonstrate that its graduates performed equivalent to

Performance Variable	Maximum Points	Method of Measurement
		graduates from similar institutions (15 points); has assessed performance and can demonstrate that graduates performed above graduates of similar institutions (20 points)
Evaluation of Institutional Programs and Services by Enrolled Students, Recent Alumni, Community & Employers	20	Institution has, for any year in past three, conducted a survey of one referent group and can report results for survey of graduates for one or two academic fields (5 points); survey of two or more referent groups for one or two academic fields (10 points); survey of one referent group with application to entire institution (15 points); survey of two or more referent groups with application to entire institution (20 points)
Peer Evaluation of Academic Programs	20	Institution conducted a formal evaluation of at least two major programs during last three years using team of scholars from other institutions outside the state or practicing professionals within a field (5 points); conducted at least 5 evaluations within last 5 years as part of ongoing program of peer review (6-15 points); demonstration that one or more of its academic programs enjoy a favorable peer reputation outside the state (15-20 points)

Source: Tennessee Commission for Higher Education, "Allocation of State Funds on a Performance Criterion," pp. 61-65.

SCHEDULE B

Tennessee's Instructional Evaluation Schedule Applied to Two Percent of Each Institution's Educational and General Funds To Derive the 1979-80 Recommended Improvement Funds

(Selected Tennessee Institutions)

Institution	Instructional Evaluation Schedule						1979-80	1979-80	1979-80
	Eligible Programs Accredited	General Education Outcomes	Specialized Field Outcomes	Student, Alumni Employer Opinions	Peer Evaluation	TOTAL	Educational & General Funds (estimated)	Improvement Funds Possible (2%)	Improvement Funds Recommended
East Tennessee State	10	0	0	20	10	40	$15,035,900	$300,718	$135,323
Tennessee State Univ.	14	0	5	10	5	34	$15,011,300	$300,236	$102,080
Chattanooga State Community College	16	0	5	15	0	36	$ 4,259,700	$ 85,194	$ 34,930
Tennessee Technological University	17	20	5	20	5	67	$12,344,400	$246,388	$165,415
Motlow State Community College	20	0	5	0	0	25	$ 2,044,300	$ 40,886	$ 10,222
Tri-Cities State Technical Institute	0	0	0	0	0	0	$ 1,514,900	$ 30,298	$ 0

Source: Tennessee Higher Education Commission, "Allocation of State Funds on a Performance Criterion," pp. 70-71.

SCHEDULE C

The Instructional Evaluation Variables of 1979 Compared To Those Recommended For 1983

The 1979 Schedule	Points Possible in 1979	Points Possible in 1983	The 1983 Schedule
The Proportion of Eligible Academic Programs Accredited	20	25	Program Accreditation
Performance of Graduates on a Measure of Specialized or Major Field Outcomes	20	30	Program Field Evaluation A. Externally Validated Test, Locally Developed or Peer Review (20 Pts) B. Improved Programs or Programs of Exceptional Quality (20 Pts)
Performance of Graduates on a Measure of General Education Outcomes	20	40	Institution-wide Education Outcomes A. General E.I. Outcomes (20 Pts) B. Placements in Vocational Fields (20 Pts)
Evaluation of Programs by Students, Recent Alumni, and Employers	20	5	Instructional Improvement Based on Referent Group Survey (students, alumni, community leaders)
Peer Evaluation of Academic Programs	20	5	Planning for Instructional Program Improvement (submitting a plan with certain features)

conclude that the process has helped sharpen institutional mission by focusing attention on educational processes; it has complemented the general formula, and it is the most prominent effort nationally to measure educational outcomes for extra dollars from the State. However, none of the performance variables in the 1979 Instructional Evaluation Schedule directly measured "value-added" in the sense of the improvement of individuals over time within the educational system. Also, competition among institutions is certainly fostered by those variables which added points if an institution's graduates or programs outranked the performance at other institutions, even when the competition is only among institutions with similar missions. Overall, however, the results of the Tennessee experiment should be considered a qualified success in reaching its objectives, especially considering the obstacles.

But two larger questions come to mind: **Is performance funding going to replace existing formulas throughout the nation?** Probably not. The success of performance funding rests squarely on a state's objectives. If the state intends to increase faculty productivity or to improve the instruction directly through performance funding, its efforts will likely fail. For these objectives, the Tennessee experience shows that performance funding would be an expensive and — at best — an indirect means.

Shouldn't systematic evaluation of the sort rewarded in Tennessee occur already in institutions of higher education? Ideally so, but most state formulas do not provide resources for such efforts, and the institutions would be hard pressed to divert resources on any large scale. Presumably, the formulas could add funds for evaluations which might parallel the efforts in Tennessee which is, with all the jargon removed, really a categorical program for promoting evaluation, surely an important state policy.

From my perspective, performance funding as implemented in Tennessee is not a panacea which directly links dollars to educational achievements. Rather, it is best understood as a way to institutionalize introspection through the state budget.

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PART XI

STUDENT AID AND THE FEDERAL DEMISE

CHAPTER 24

Financial Aid and the Student Role

John Heneisen

Because of its uniqueness I need to tell you about Berea College. Located in Berea, Kentucky, it is a four-year institution which was organized in 1855. It offers courses leading to both the Bachelor of Arts and Bachelor of Science degrees. Our primary service area is the Southern Appalachia mountain region. Eighty percent of our students must come from that area. Fifteen percent come from the rest of the United States, and 5 percent represent over twenty countries around the world.

One of the things that sets Berea apart from other good liberal arts colleges is the labor program which is an integral part of the total educational program of the institution. Each student is expected to perform some of the labor required to maintain the institution thus gaining an appreciation for the worth and dignity of all the labor needed in a common enterprise. It also helps each student to acquire some useful skill and to develop a sense of responsibility for a specific task.

Dr. John Heneisen is Associate Dean for Labor/Student Financial Aid, Berea College.

The aim is to make available a sound education to students who are unable to meet usual college expenses. Students who are accepted at Berea College must come from families with limited economic resources and must have the ability and character to use a liberal education. No student is expected to pay any part of the tuition.

We look at the educational program as a life experience that includes the performance of work. Student labor has been a part of the Berea program since 1859 and is essential to every aspect of the operation of the College. Unlike most institutions which have built their financial-aid programs around grants, Berea has built its financial-aid program around self-help in the form of work. The students' earnings are the primary source of financial aid. The labor program is also important to the economics of the College.

Students who carry a normal academic load typically will work 10 to 15 hours per week. Through these earnings they can earn from 25 to 75 percent of the cost of room, board, and fees. Students work in more than 100 different labor departments. Of approximately 1,500 in the labor program, a little over 300 work to meet basic needs of the community for food, cleanliness, and care of buildings. Another 450 work in the academic program in assignments including secretarial duties in various departments, teaching associates, tutors, and laboratory assistants. Other college offices and services are staffed primarily by students.

Berea's labor program adds a dimension to the campus which makes possible additional sets of relationships. Students know each other as co-workers as well as classmates. The integration of labor and learning establishes a pattern of doing and reflecting that has important implications for both education and vocation. Students learn standards of performance related to utility and quality of services and products as well as to academic standards. This experience remains central to their attitudes, so that the labor program becomes a bridge between student life and the independent self-supporting life which follows college.

Other Forms of Aid

While it is obvious that we put most of our emphasis on work as the primary form of financial aid we are heavily dependent on the other forms of aid. Our students will receive annually about $1.3 million from the Pell Grant program along with $200,000 from SEOG and $500,000 from state grant programs. We will also give almost

$300,000 in long-term loans. All of this for an enrollment of under 1,600 students who are not paying the $5100 tuition. You can see that any significant reduction in governmental support does have a major impact on our institution.

We have looked at several options to relieve financial pressure on the institution yet still meet our commitments to the students. Here are some things we have done which may also be helpful to your institution:

1. **Increasing Parental Contributions**

All of our institutions use a needs analysis system approved by the Department of Education to determine what the family should be able to contribute toward educational expenses. These contribution figures are based upon national averages. If you know your students and the areas of the country from which they come, you may find that it is possible to increase the parental contribution expectation without undue pressure on the families. If you are from some of the higher cost areas such as parts of the West Coast you may find an opposite effect.

You may want to carefully check the data submitted by the families and correct for inaccurate reporting. An example would be the reporting of home value as the amount paid for the home. The family is supposed to report current market value. With increased property values a significant difference can be made in contributions from the family. It is critical that we check the accuracy of reported information.

2. **The "Self-Help First" Plan**

This financial aid packaging plan works especially well at schools whose budgets are such that Pell Grants and State Grants do not cover most of the budget. At Berea we use this plan by packaging first the student summer savings expectation and then the expected earnings from the labor program. Long-term loans can be included as a part of this procedure. This packaging plan can be based on a percentage of the total student budget or a specific dollar amount. We use a percentage of the total student budget with a higher percentage of self-help expected as the student progresses from freshman to senior.

3. **Packaging State Grants**

It is very important that a student apply for all the aid which may be available. The state grant programs make up a significant amount of money which should be used to its maximum. Care should be taken that every student from a state with a grant program submit an application for that grant.

4. **Targeting Institutional Funds Into Work-Study Funds**

We have found that targeting institutional funds into the work program is very advantageous. These funds can supplement the college work-study funds, providing more work opportunities for needy students. Institutionally targeted funds can also provide jobs for those who do not qualify for the federal program. These students can fill manpower needs of the institution in addition to the positive aspects of the work experience.

5. **Revising Capital Campaigns and Alumni Donations**

Donors are becoming more aware of the impact on institutions of the federal student aid budget cuts. By adding the funding of student aid to capital campaigns and alumni campaigns, institutions can build both endowments for student aid and increase current giving for student aid. We have found this to be especially valuable at Berea. One of the more attractive aspects of our financial-aid program is the labor program. People tend to like to give to students who are willing to do something to help themselves.

Here are a few of the creative things we have done in addition to, or as a result of, the things I have discussed.

1. **Dormitory Renovation**

We have some older dormitories on campus which were in need of renovation. Much of the needed work was in the form of plastering, painting, laying tile, repairing window pulls, and replacing or refinishing doors. This is work that could easily be done by students and would otherwise have to go to outside contractors. A student crew was formed and trained to do the work. The first three-story dormitory was renovated in one summer of full time work and part-time during the school year. The project was so successful that we have renovated several additional dormitories since then. Not only did this save the institution a substantial amount of money, but we also found that

pride involved in the work was such that the students were less likely to damage the dorms.

2. Alumni Building (Student Center) Operation

A few years ago we added an addition to our student center which doubled the space available and more than doubled the programming. Rather than expanding the staff we looked at ways of better utilizing students in the operation. The end result is that we have the same number of full-time staff as before but provide much better service and maintenance at a lower cost. In this case we have also found that better utilization of students caused a higher degree of pride in the building.

3. ANTS (Any Non-Technical Service) Crew

In analyzing some of the needs of the institution we found that there were many cases where extra help was needed on an irregular basis to perform nontechnical services. Some of these included unloading large deliveries, mass mailings, and special assistance during such busy times as homecoming. A student crew was formed which named itself the "ANTS" crew for any nontechnical service. This crew has provided many services which other departments were not staffed to cover. The crew has taken such pride in the fact that they can do almost any service that competition has developed to join the crew. Much money has been saved by this crew.

4. Computer Programming

A couple of years ago we decided to go "on line" throughout the campus in both instructional and administrative data processing. We looked at various packaged programs. They were very expensive and did not lend themselves adequately to what we wanted to do. The decision was made to hire a systems analyst to direct the computer center and do our own programming. The systems analyst, utilizing students only, did a study of the needs of the campus. After that study students were assigned to write the programs. This has been very successful. An example is the Labor and Financial Aid Office. One year ago we were operating with only payroll assistance from the computer. We are now on line, and things are going well. A neighboring institution purchased an expensive package over a year ago, and they are still not fully operational.

Though I could name many other things we have done with student

labor. I think these examples show some of the diversity possible in "doing more with less." The uniqueness of your institution may require different approaches, but with creative planning you too can "do more with less."

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PART XII

PAINFUL CHOICES: FISCAL STRESS AND RESOURCE ALLOCATION

CHAPTER 25

The Importance of Process: or "What I Tell You Three Times is True"

Frank M. Bowen

For as practical a group as the present company, my paper is long on reminisence and short on new data. This is by way of explanation, not apology. Two years ago at this conference, I reported on a study of ten California campuses that Lyman Glenny and I had completed in 1979-80. In that earlier study we stated that

> administrators and faculty at individual campuses and districts can do very little to avoid adverse enrollment and financial changes in the 1980s. We do not discount efforts to enroll currently underrepresented groups, for example, nor efforts to increase extramural funding. These efforts may well moderate enrollment and financial stress at some places, but probably not to the extent that will render consideration of substantial program and personnel changes unnecessary. Both the qual-

Dr. Frank M. Bowen is a consultant and author in higher education finance.

> ity of the program and personnel decisions and their acceptability to internal and external constituencies will depend largely on the procedures through which these decisions are made. It is within the control of administrators and faculty to establish these procedures (Bowen and Glenny, 1980, p. 53).

This old quotation is the conclusion of this new, 1982 paper. A little bit of new information appears, but most of what follows is history:

- A quick look at the 1975 study, *State Fiscal Stringency*, that started this whole thing.
- A brief review of the 1979 *Uncertainty* study, essentially the paper presented here in 1980.
- An attempt earlier this year to bring the 1979 study up to date.
- A serious, if somewhat less than resounding, conclusion.

"'Just the place for a Snark!' the Bellman cried . . ."

Ten years ago, Lyman Glenny began an extensive study of state budgeting for higher education. Many of us were involved in it — Frank Schmidtlein, Tony Morgan, Stewart Epstein, and Dick Meisenger, among others. My particular task was an examination of public college and university response to substantial reductions in state appropriations. You may recall a forerunner of the present fiscal problems in 1973-74 in a number of states. We looked at institutions in five states that seemed to be in the most difficulty at that time: Florida, Michigan, New Jersey, New York, and Wisconsin.

The final report stated seven "first principles of academic administration," noting that these were old hat to everyone who had ever attended a meeting on higher education planning or read a book about it. But we stated them, nevertheless, for, however familiar, they were rarely reflected in practice. Another iteration now — and for the same reason:

1. Establish campus roles and missions in terms of existing and proposed academic programs and campus and program objectives.

2. Review new and existing academic programs under procedures that require extensive faculty participation.

3. Assure routine collection of basic information about students, faculty, academic programs, use of facilities, and costs.

4. Determine academic program priorities based on campus missions, academic plans, and data projections, scheduling proposed changes in existing offerings over a three to five year period.

5. Assure fiscal and programmatic flexibility by retaining or recapturing funds, faculty positions, or both, to meet shifting demands and to support new and experimental programs.

6. Develop procedures for the layoff, relocation, retraining, and termination of tenured and nontenured faculty and staff.

7. Maintain a continuing dialogue among State higher education agencies and executive and legislative fiscal agencies with the objective of defining explicit relationships among the elements of student access, academic quality, and budgetary support (Bowen and Glenny, 1976, pp. 72-74).

One additional guideline is worth mentioning, however, for it offered advice to elected officials. "Governors and legislatures must indicate explicitly what changes in state policy they wish to have implemented when fiscal stringency upsets the expected and traditional relationships among student access, program quality, and state support (Bowen and Glenny, 1976, p. 79).

This advice was about all that remained of the initial objective of the study. As experience of the past few years has now taught, reductions in higher education budgets generally equate with remarkable accuracy to the amount of state general funds required to balance the state budget. Allocation of these cutbacks, in turn, is usually characterized by belated state executive and legislative discovery that colleges and universities should have the high degree of flexibility that they had been seeking for so long: let **them** make the hard decisions within reductions that are either across-the-board or proportionate to enrollments or historical formula ratios.

"Just the place for a Snark! I have said it twice . . ."

In 1979, Lyman Glenny and I again looked at the problems of fiscal stringency. Under a contract with the California Postsecondary Education Commission, we surveyed ten California campuses to describe how their administrators and faculty were coping with enrollment and fiscal stress. The report to the Commission suggested

1. **Pervasive uncertainty.** Everyone's crystal ball was clouded. Inability to predict institutional enrollments and budgets was only a small part of the broader national and state economic uncertainty.

2. **Reluctant leaders.** With notable exceptions, campus heads and faculty leaders avoided open and public consideration of possible enrollment decline. All were seriously concerned about "self-fulfilling prophecies," campus morale, and the dangers faced by bearers of evil tidings.

3. **Erosion of flexibility.** At virtually all campuses the cumulative impact of earlier, relatively minor budget reductions and of the inroads of inflation on real dollars had severely limited options for meeting the next crisis.

4. **Faculty attrition as a remedy.** All but a few campuses were relying on faculty retirements and resignations to give balance to overstaffed and understaffed programs that had resulted from students' shifting programmatic demands.

5. **Classification of responses.** We tried to avoid the usual dichotomy of "across-the-board" and "selective" budget cuts by posing a five-part classification. At the time, this new classification was useful in isolating and highlighting **procedures** as an important, independent response to stress.

6. **Procedures and criteria.** We suggested that high priority be given to rigorous academic planning and program review procedures to determine program emphases and faculty staffing levels as a means of coping with enrollment and financial stress. We were presumptuous enough to outline possible procedures (Bowen and Glenny, 1980).

"Just the place for a Snark! I have said it thrice . . ."

The 1982 "restudy" began when I was asked to be on this panel. Given substantial leeway in choice of topic, I let curiosity dictate an attempt to find out what happened to the ten campuses in the *Uncertainty* project.

Uncertainty has increased. Uncertainty about financing and enrollments is greater now than it was in 1979 according to seven of the ten campus heads. Two find "about the same" uncertainty now as in 1979. Only one respondent finds "less uncertainty" in 1982, but he also notes that this is "in general" and that greater uncertainty exists in state budgeting, a comment echoed by two others.

The numbers who believed that enrollment and particularly financial uncertainties are greater now than in 1979 are somewhat surprising. In 1979, higher education in California was entering its second unhappy year of adjustment to the severe property tax limitations of Proposition 13. For the community colleges in particular, the summer of 1979 was one of great trauma — when we started interviewing in August, the community colleges, then two months into their budget year, still did not know either the amount of state support or the conditions on its use. The four-year campuses were in slightly better shape, but they too had suffered reductions. Why has uncertainty increased in the three intervening years? Probably the major reason is that California has finally exhausted the large General Fund surplus that it enjoyed when Proposition 13 was adopted. In 1981-82, first in the Governor's Budget and again by executive action during the budget year, the budgets of the four-year institutions were reduced with the expectation (in fact realized) that the reductions would be partially offset by increases in student charges. And California entered the 1982-83 budget year with the probability that mid-year reductions would once more be required. These reductions were a new experience for California's colleges and universities. A second major reason for greater uncertainty is in the cumulative impact of successive, low budgets; erosion of flexibility; and fewer "easy" answers. A recently retired campus head recalls the gradual depletion of reserves, early retirement of full-time faculty, layoffs of part-time faculty, reduction of supplies and materials, cutbacks in services, and dismissal of administrators. Academic programs and teaching positions will inevitably be the next victims, but which ones? When? And How?

Reliance on Procedures is Justified. Nine of the ten campus

heads believe that the great reliance on rigorous planning and program review procedures in the earlier report was justified. None think that the reliance was not justified. One respondent checked "no way to tell," noting that he was new to the campus since the earlier report. Admittedly, the respondents have a minor, vested interest in the conclusions of the *Uncertainty* report, for they were actively helpful from its inception through the final draft. Nevertheless, confirmation of this conclusion of the earlier study is gratifying. Lyman and I did not begin that project with the preconception that we would "discover" the importance of process to adjustment to stress. Unlike the conclusions of more than a few "policy studies," our conclusion was reached only after data had been collected.

Procedures have improved. Eight of the ten campus heads report that the current planning and program review procedures at their campuses are more adequate to meet enrollment and financial stress than they were in 1979. Two state that their procedures were neither more nor less adequate than three years before. None consider procedures less adequate. Responses suggest three categories of reasons for improvement:

- In at least one instance, formal procedures have been established at a campus where previously there were none. Half of the campuses report instituting new or substantially modifying their existing procedures to enhance their ability to meet stress.

- Several campus heads suggest that procedures were more adequate simply because passage of time has provided administrators and faculty with experience in working with them and with each other. At one such campus, broad participation in very closely related planning, program development, and resource allocation processes was in place in 1979. By 1982, the campus head could speak of the substantial "long-term payoff for an approach which establishes ownership of the problem among a great many individuals."

- Finally, and closely related to the prior reason, two campuses report greater faculty involvement in planning and program review procedures. At a third institution, where substantial, formal faculty participation was present three years ago, improvement is found in a growing mutual respect between faculty and administrators in the operation of the procedures.

Not all is roses, of course. One interested observer commented that the processes are better but that the will to use them has eroded "because of the failure of catastrophe to strike."

Faculty are more cooperative. At seven of the ten campuses, the faculty are reported to be more cooperative in meeting the problems associated with enrollment and financial stress than they were in 1979. Two report that faculty cooperation is about the same as three years ago, and one reports faculty as less cooperative.

The questions specifically addressed to issues at individual campuses provide interesting answers but ones from which it is difficult to generalize. But some themes emerge:

- **The "Cassandra" Problem.** I have noted the comment of one observer that the will to use better procedures erodes because of the "failure of catastrophe to strike." But a campus head does not believe that the "Cassandra" problem is any longer an issue: the depressed economy that has helped keep up enrollments has also alerted faculty "to the fact that all is not well."

- **Enrollments and Faculty Staffing.** In 1979, we found most campuses relying on normal attrition of faculty through retirement and resignation to remedy the staffing imbalances caused as student interests shifted from liberal arts areas to occupational and professional ones. The past three years have shed little light on this issue, for enrollment has held up at the ten campuses in the sample. One campus respondent reports that imbalances had been largely eliminated. Another states that imbalances have been somewhat eased, noting that more faculty members than expected have taken advantage of phased and early retirement programs.

- **Alternative Funding.** In 1979, two campuses were actively pursuing alternative funding sources to supplement state support. They continue to do so and anticipate success in their efforts.

- **Outside Forces.** In 1979, several campuses expressed particular concern about federal, state, and systemwide reporting and other mandates. From several responses, it would seem that although federal and state requirements may have increased or remained about the same, systemwide require-

ments are the most troublesome. One respondent mentions the lack of clear systemwide policy explanations for some decisions. Another is concerned about the emphasis on short-term responses at the systemwide level. Still a third finds growing inflexibility in the central staff.

- **Facility Construction.** In 1979, administrators at two institutions found that delays in construction at new campuses were major impacts of fiscal uncertainty. The problems remain unresolved in 1982, for fiscal stringency has continued even though enrollment has increased or remained stable.

"What I tell you three times is true."

I have told you three times that rigorous processess for reviewing plans, programs, and faculty staffing are important as a means of coping with enrollment and financial stress. We probably need not pursue this topic further (see Appendix). But two final comments: first, a word about the relative importance of process and second, advice in the unlikely event that you are still not convinced that process is important. Let us try ranking the review processes we have been discussing with an institution's academic core, with executive leadership, and with admissions and recruiting.

- The academic core — the faculty, the academic and occupational programs and their perceived quality — is much more important in coping with stress than is leadership or any planning or recruiting processes that might be devised.

- Leadership is critical. In times of growth, it was at least a temporary substitute for everything except parking space. In times of retrenchment, on the other hand, leadership has its limits. When faculty jobs are at stake or when strongly held beliefs in the value of particular programs are challenged, even the most inspiring leader can lose followers. Credibility is more likely to reside in known, objective processes than in charisma. An "infrastructure" — a context of procedures — will be required to sustain and give credibility to even the most capable leader. But leadership is more important than process. Leaders are the source of the broad goals, the specific objectives, and the criteria that undergird process. And leaders must be willing to meet a rapidly changing situation by modifying processes. An experienced respondent predicts, I believe correctly, that "the coming years will not be good ones for those with a passion for neatness and fixed organization."

- What about recruiting and admissions? Assume a forced choice between using resources for either improving recruiting or improving the processes for planning, program review, and faculty staffing. What choice would you make?

Some may choose to strengthen the admissions, outreach, and school relations offices. After all, if the problem is too few students, why not go to the bottom line and recruit more of them? This choice would seem supported by those who characterize educational institutions as having "three major functional areas: the academic core, admissions or marketing, and finance" (Frances, 1982, pp. 113-4). The increasing tendency to shoot admissions directors when enrollment declines (Perry, 1982) also seems to lend authority to this choice. But the choice would be wrong.

The "academic core" is the **only** major function of a college or university. Financing can enhance the academic core but only if wisely used. Rational processes for determining the use of funds will not assure wise decisions, but they can usually prevent really bad choices. Similarly, recruiting the right students — those whose aspirations and qualifications match the campus offerings — will contribute to the quality of the academic core. But enticing student numbers by lowering admission standards, easing program requirements, or renaming Biology 101 as "Biotechnology, Big Business, and You" will lead to disaster.

I have not tried to keep track of the number of times Lyman Glenny has said (or others have quoted) his comment that the competition for students in the next ten years will become more and more rapacious; many of us will be ashamed of the used-car salesman techniques that will be used to proselytize students.

My advice then: spend your time and money on establishing and maintaining credible, participatory processes for reviewing plans, programs, and faculty staffing. Dollars will be better spent when such processes are in place. The quality of the academic core should at least be maintained and may be improved. In the long-run, it is by the quality of their educational offerings that institutions must compete and be judged.

Now, a final suggestion for those who doubt the importance of process. Over the past ten years and in myraid settings, Lyman and I have exhorted anyone who would listen that they should prepare for enrollment downturns and the financial problems that such down-

turns entail. I wonder from time to time if our sometimes shrill warnings are really heard at conferences such as this. Clark Kerr (quoting Leo Tolstoi) has correctly likened family unhappiness with that of colleges and universities: "Happy families are all alike; every unhappy family is unhappy in its own way" (1982). The generalities of the little talks to which you are so patiently listening are seldom directly relevant to the way in which your own institution is unhappy.

My final word is to urge each of you to seriously consider building on what Lyman and I have done. Initiate a study in your own state or system that follows the research design of our ten-campus, *Uncertainty* study in California. You will be no more able to impose logic on the illogical world of state and academic politics than Lyman and I have been, but such a study would, I believe, bring home the need for rigorous planning and program processes in coping with stress. You, too, would learn the importance of process and so would participating administrators and faculty. In addition, you — and they — would uncover the particular causes of unhappiness that are unique to each campus as well as those that are more pervasive. Finally, and perhaps most important, you — and they — would cooperate in the search for the sources of strength on each campus that will enable it to survive the parlous times ahead with honor.

APPENDIX

The Hunting of the Snark

In the present paper, I have relied heavily on the first two verses of a seminal work by one of the best known Victorian educators and logicians. Lewis Carroll's *The Hunting of the Snark* was published in 1876. His preface stressed "the strong moral purpose" of the poem as well as its cautious inculcation of "arithmetical principles" and "its noble teachings in Natural History." The two opening verses are, of course, the most relevant to my own approach:

> Just the place for a Snark!" the Bellman cried,
> As he landed his crew with care;
> Supporting each man on the top of the tide
> By a finger entwined in his hair.
>
> Just the place for a Snark! I have said it twice:
> That alone should encourage the crew.
> Just the place for a Snark! I have said it thrice:
> What I tell you three times is true.

History has confirmed the lasting value of Carroll's work. For example, most of us have designed complex research instruments to uncover the roots of "power" and "authority" in colleges and universities. Yet all such designs seem to have been anticipated by Carroll and the Bellman over 100 years ago:

> They sought it with thimbles, they sought it with care;
> They pursued it with forks and hope;
> They threatened its life with a railway-share;
> They charmed it with smiles and soap.

The quotations are from *The Complete Works of Lewis Carroll* (New York: Random House), a book, incidentally, with 1293 pages and without a publication date. For a detailed analysis, one should see Martin Gardiner's *The Annotated Snark* (New York: Simon & Schuster, 1962). The Bellman and his crew ultimately found a Snark, although perhaps not the particular kind for which they were looking.

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CHAPTER 26

Resource Reallocations at The Ohio State University

Weldon E. Ihrig

What happens to a major research University when faced with unexpected and significant cuts in one of its major sources of revenues, not once, not twice, not thrice, but four times during the first eighteen months of the biennium? Hopefully, as has been the case at OSU, the entire University community works together to adjust to such cutbacks in funding while preserving the fundamental characteristics of the institution. It has been a time when this University showed its incredible strength and resourcefulness. The purpose of this paper is to share these experiences, explain the rationale for the actions taken, and describe the results achieved.

When the unexpected word of the latest and most severe revenue shortfall was received in January, immediate efforts were begun to identify how the University would reallocate resources and cut expenditures to address this severe budget crisis. President Jennings at that time set forth the basic principles which would be followed in addressing the situation and guide budget planning for the next fiscal year. He emphasized that the University's highest priority during this budget situation was to protect the quality of instruction and research. In addition, the expenditure reductions for the balance of fiscal year 1981-82 were to be accomplished so that they would not produce irreversible results.

Dr. Weldon E. Ihrig is University Fiscal Officer, The Ohio State University.

With those guidelines in mind, work was begun to develop a plan to address the $19.6 million in cuts that had to occur prior to June 30, 1982. The most significant items in the reallocation of resources were the new assessment of the cuts from the instruction and general budgets based upon total resources available. First, let us discuss the distribution of the instructional and general budget cuts. The first step for this process required identification of the total resources available to each college and administrative unit. This analysis included, in addition to the annual budget allocations, balances in all accounts available to each unit including gift and endowment monies, released-time monies from sponsored research projects, as well as resources available in all earnings operations. The latter included operations ranging from the multi-million dollar ones, such as hospitals, residence halls, and athletics, to the smallest, such as conferences and sales from manuscripts.

The portion of the expense reduction assigned to the instructional and general budget was then distributed on this total resource base, **excluding** those resources supporting teaching activities. This provided 100 percent protection of the pure teaching activities by not including those instructional resources in that portion of the budget used as a basis for distributing the budget-cut targets. For example, a college with a total budget of $15 million, $10 million for direct teaching activities and $5 million for college office, teaching support and earnings activities, would have $10 million exempted from any cuts. This college would be assigned its budget cut target based upon only the $5 million nonteaching support portion of the budget. These two basic premises, use of total available resources and protection of the teaching budgets, were significant factors in gaining University-wide support for the budget-reduction plan.

Administrative Overhead Charges

The other significant approach to reallocation, the administrative overhead charge to earnings operations, was somewhat more controversial. An earnings unit at The Ohio State University is any unit that charges a direct fee to support the services provided. This ranges from University Hospitals with a budget in excess of $100 million to the multitude of conferences for which charges are levied on the participants. Plans had been under development for the past two years to determine an appropriate level of overhead charge to insure that all earnings operations assume fiscal responsibility for the total costs involved in providing their services. Such overhead costs include everything from payroll, purchasing, accounting, and public

affairs to the President and the Board of Trustees. As these earnings units have grown, so have their burdens on the instructional and general budgets. Without appropriate compensation, these units were actually being subsidized at a cost to the instructional budgets even though the major earnings units had traditionally paid all their direct costs including utilities, custodial and maintenance services.

The University budget passed by the Board of Trustees in December had included a phased implementation of this overhead charge which was to assess the charge as well as provide a credit to those units providing services for the instructional and general operations of the University. When the January budget crunch hit, the President announced full implementation of the overhead charged beginning January 1, 1982 but deferred any academic credits.

One important component of this plan was to insure that the major earnings units (annual sales of $500,000 or more) received their total revenues which included the interest income earned on positive cash balances, at the same rate as earned by the University's cash investments pool. Likewise, any earnings units carrying negative cash balances in any month would be assessed interest charges at this same rate of interest to compensate the University's general fund for carrying their negative balances.

The result of this overhead reallocation activity during 1981-82 was to provide $3.5 million in net additional resources to the instruction and general budget of the University. This resource has grown to over $8.0 million on an annual rate basis as of the current fiscal year.

Another basic principle established was that the line-item State-supported units would receive their budget cuts in the same proportion as their original appropriation. The President also deferred the special equipment acquisitions and other one time allocations for the remainder of the fiscal year.

The rapid response to the State's announced revenue shortfall plus the openness of the approach resulted in an immediate positive reaction by the University community. The targets were provided to the deans and vice presidents during the third week of January, and they were to have their budget reduction plans returned through the appropriate channels along with the actual budget transfer documents providing the assigned funds by the end of the first week of February. This goal was accomplished in record time for 99 percent of

the units, whose cooperation was due primarily to the priority emphasis on protecting the teaching budgets of the institution plus the openness and clear explanations regarding the budget situation and the approach being used to address the crisis.

The Problem of Recurring Cuts

The next step in Ohio State's continuing budget saga over the current biennium was to develop a plan to address the recurring cuts to be effective fiscal year 1982-83. The first problem was to identify the amount of the State revenues we could expect, since until budget legislation was enacted, the shortfall was a moving target. Our approach to this uncertainty was to initiate budget planning including cuts at the level of support we expected to receive but develop a second budget plan based upon the worst case situation of no new State funding. Two budgets were presented to the University's Board of Trustees in June — one balanced assuming legislative action to increase revenues and a second with an $8 million deficit if there were no action by the legislature. Both versions contained recurring budget cuts totaling over $22 million plus fee increases set at 12 percent.

While the basic approach established during the January cuts was maintained, the allocation of the cuts to the continuation base budgets required inclusion of the teaching budgets. The administrative overhead recovery and distribution of line-item reductions were extended on an annual rate basis continuing the same approach established in January. A key factor in the assessment of overhead charges is to avoid any duplication of charges between the internal assessment and the recovery of indirect costs from Federal research projects. Such internal overhead charges are encouraged by the A-21 regulations, but the institution must be able to demonstrate that the indirect costs are only recovered once. This has been accomplished at Ohio State by the use of a single model for the assignment of indirect costs to all units of the University. These same results are then utilized for each type of recovery, whether internally or externally charged to sponsored research or Medicare sources. This practice avoids the potential for duplicative recovery of indirect costs.

The major new budget reallocation feature was the distribution of the $6 million cuts from the instructional and general budget. While the total resources approach was again used, this time it had to be restricted to recurring budgets rather than including balances. The retrenchment was allocated on a base budget developed using the following loading factors.

Instructional & library budgets	100%
Non-instructional budgets	200%
Computing services allocations	20%
Uncommitted salary lines	200%
1980-81 budget net adjustments	200%

These factors continued the University's priority emphasis on protecting the instructional budgets.

Another factor in this effort was to reallocate resources as necessary to recognize shifts in student enrollments among academic programs. The following model was used for this academic workload reallocation between the colleges.

Prior year enrollment variance from projections	300%
Reduce highest cost per student programs	200%
Four-year average cost per student by program	100%
Enrollment changes since 1975-76	100%
Improve support for 25 percent of colleges with lowest cost per student	100%

The reallocation amounts, both positive and negative, were added to the colleges retrenchment targets producing a net amount not to exceed 3 percent of their budgets. The budget-cut allocations to the administrative units, while not including any enrollment adjustments, were held within 4.5 percent of their instructional and general budgets.

Another factor in the total resources approach to budget planning was to insure that the students would not have to bear any undue burden of the shortfall in State support through excessive fee increases. Accessibility in the Land Grant tradition continues to be a major consideration in budget planning at OSU. Therefore, President Jennings instituted a policy which limited the combined average increases in all charges assessed by the University to 12 percent. This policy not only maintained control over charges for all University services but continued management emphasis on improving productivity and reducing costs by all earnings units. One major result of this emphasis on cost containment was no increase in University Hospitals' charges over those approved for the prior year.

While the legislature did provide increased resources for 1982-83, the continued uncertainties of Ohio's economy makes it difficult to plan on receiving full-funding of the State appropriation. This situation requires budget flexibility and anticipation of future cuts. It

is hoped that the approaches and priorities established over the past twelve months will continue to enable us to meet our goals of maintaining the essential quality of the institution by retaining our best faculty and staff; maintaining accessibility through moderate tuition and fee increases; addressing our serious problems in regard to outdated equipment and a deteriorating library acquisitions budget; as well as making available the resources to respond to those emergency needs that inevitably develop in a comprehensive and dynamic institution such as The Ohio State University.

PART XIII

NATIONAL STUDIES AND RESEARCH PAPERS

CHAPTER 27

Trends in Higher Education Financing

Paul Brinkman

This report is an overview of the results of a study on higher education financing conducted at NCHEMS. The study is the third in a series of efforts to develop financing indicators that can provide useful background information for administrators and analysts in higher education. The initial studies dealt with the costs of attending college (Brown, Kahl, and Kriz, 1981) and student financing of those costs (Leslie, 1982). The focus of the study being reported here is broader, as it encompasses both an institutional perspective on higher-education financing and the perspective of those who consume and invest in higher education. Its aim is to provide basic data about the revenues flowing into colleges and universities during the middle and late 1970s — how much, to whom, and from whom.

I. The Institutional Perspective

Formal higher education as we know it today depends on a periodic flow of financial resources to the institutions — colleges and

Dr. Paul Brinkman is Senior Associate, National Center for Higher Education Management Systems, Boulder, Colorado.

universities — that makes it happen. Those institutions are a diverse group. There are considerable differences in the amount of revenue, the sources of revenue, the amount of assets, and so on, available to various types of classes of institutions. By compiling financial data (from HEGIS) disaggregated by institutional sector or type, we gain some insight into our nation's preferences for various forms of higher education.

Market Shares. This is simply a matter of who gets what share of the available resources. Some highlights of changes during the period from FY73 to FY80 follow:

1. Current fund revenues remained fairly constant between sectors.

   a. Two-thirds went to public institutions; one-third went to private institutions.

   b. Proprietary institutions increased their share but still received only three-tenths of one percent of total current fund revenues in 1980.

2. Educational and general (E&G) revenues (FY75 to FY80)

   a. changed more among the various types of public institutions than among the various types of private institutions.

   b. declined slightly for women's and church-affiliated colleges but increased slightly for predominantly black institutions.

   c. increased for large institutions (FTE enrollment of 8000 or more).

Dependence. Most observers would probably agree that, other things being equal, some sort of balance or diversity among sources of revenue is preferable. There has been particular concern about the extent to which some private institutions have become dependent on revenue from tuition. Interestingly, the data compiled for this report indicate that the extent of dependence on tuition for comprehensive and baccalaureate private institutions, while relatively high, actually decreased slightly from FY75 to FY80 with respect to E&G revenues.

Other highlights from the period FY75 to FY80 regarding changes in shares of revenue from various sources follow:

1. At public institutions, changes appear to be material — state appropriations went up, federal and local appropriations went down, sales and services of educational activities and hospitals went up.

2. At private institutions, changes were very modest — the biggest percentage gainer was "other sources" (mostly short-term investments) going from 3.1 percent to 3.9 percent of current fund revenues.

Fund Balances. The accumulation of wealth in our colleges and universities is difficult to assess, due to the nature of the fund accounting system used by the institutions and the national reporting schedules for financial data (HEGIS). Fund balances, however, do shed light on some dimensions of the asset structure of institutions, including differential growth rates by type of asset. Because monies can readily be moved (transferred) from one fund to another, changes in a particular fund balance (especially the Current Fund) cannot always be taken at face value. In order to get a better sense of how well institutions were doing in meeting the financial requirements for current operations, an index was constructed taking into account only additions, deductions, and mandatory transfers to and from the Current Fund. On the basis of that index, it appears that, on average, institutions in both the public and private sectors were better off in FY80 than in FY75. By contrast, in constant dollar terms, Endowment Fund growth was not encouraging for either sector.

Over the period from 1975 to 1980, the composite balance of the five major fund groups 1) stayed ahead of inflation in the public sector and 2) fell just behind inflation in the private sector but declined noticeably in relation to Current Fund expenditures.

Unit Revenues. Revenues for day-to-day operations in higher education are to a considerable extent a function of the number of students enrolled. In many instances, the relationship is quite close, for example, at certain types of public institutions in states with formula funding or private institutions that are highly dependent upon tuition revenues. In other cases, especially at institutions that receive large amounts of funding for research or public service or whose yield on endowment provides a substantial amount of money for current operations, the relationship between total revenues and total enrollment is less straightforward.

The relationship of interest for present purposes is that between

revenues for student-related, educational purposes and number of students. From FY75 through FY80, student-related revenues on a weighted (by level of instruction) FTE basis changed as follows:

1. Overall, revenues at public institutions remained just over four-fifths of revenues at private institutions;

2. Unit revenues increased about the same for all publics (1.4 percent) as for all privates (2.5 percent) in constant dollars (HEPI);

3. The biggest percentage gainers in unit revenues were universities with medical programs and institutions specializing in the health professions; and

4. The smallest percentage gainers in unit revenues were two-year institutions and public baccalaureate institutions.

II. The Consumer-Investor Perspective

The primary issues are these: who provides what share of the total resources entering higher education, and what is the total amount of those resources, i.e., what does higher education cost?

Responding to either question requires a decision as to the range of costs to include in the analysis. In this report, all economic costs have been included: direct costs, in the sense of actual outlays or expenditures, and indirect costs including depreciation of physical assets, implicit rent (the opportunity cost of using assets for higher education rather than for some other endeavor), so-called tax expenditures (government subsidies brought about through tax deductions, exemptions, and exclusions), and foregone earnings (the opportunity cost of attending school instead of earning a wage).

Data for this portion of the analysis came from a variety of sources, chief among which are federal budget documents, especially *Special Analysis, Budget of the United States Government, 1975-1982; Governmental Finances, 1973-1980* on state and local government, along with state appropriations data compiled by M. M. Chambers; *Voluntary Support of Education, 1973-1980* on private donors; HEGIS on (net) institutional contributions; previous NCHEMS studies on college-going costs (Brown, Kahl, and Kriz, 1981) and student financing (Leslie, 1982) and, for indirect cost rates, Schultz (1960), Crary and Leslie (1978), and Cohn (1979).

The Federal Share. The federal government's role in higher education has traditionally been that of promoting special purposes, whereas the states were left, by constitutional authority, with the basic and broad responsibilities for education as a whole. Thus, federal expenditures for higher education have taken the form of support for land-grant institutions, veterans, basic research, black institutions, manpower training programs, needy students, and so on. Perhaps closest to general support are some of the so-called tax expenditures, or tax write-offs, granted by the federal government on behalf of higher education.

Funds from the federal government are channeled to higher education in basically three ways: as payments to institutions, assistance to students, and as tax expenditures (Finn, 1978). The flow of federal funds to students in higher education can be thought of as being of two kinds. Some of the funds (for example, Pell grants) are a type of direct support to students, while other funds (such as veteran's benefits) can be considered as indirect support to students (Frances, 1980). The payments, in the latter case, are indirect in that their primary purpose is not educational. The bulk of federal funds that take the form of payments to institutions are in support of research activities. Federal money also supports other activities such as programs for disadvantaged students, vocational education, and developing institutions; and a few special institutions receive large, general purpose appropriations.

The problem of accounting for the federal share on a consistent basis from year to year is formidable — expenditures are spread across an estimated 400 postsecondary programs (Gladieux, 1981). On occasion, the Office of Management and Budget (OMB) has made that task considerably easier. For 1973, 1975, and 1977, a special analysis of expenditures for education was prepared by OMB. These analyses were used by the author as the basis for gathering expenditure data (actual outlays) from the budget documents for 1979 and 1980.

During the period from FY73 to FY80, the following changes occurred in federal expenditures for higher education:

1. The total amount of expenditures

   a. increased 91 percent in current dollars, from $9.2 billion to $17.6 billion, a 5.5 percent increase in constant dollars (CPI);

b. declined 10.9 percent in constant dollars on a per-student basis;

c. declined as a share of total federal non-defense expenditures from 5.1 percent to 4.0 percent; and

d. declined as a share of the total cost of higher education from 17.9 percent to 17.0 percent.

2. With respect to expenditures for student assistance,

   a. direct assistance (for example, Pell grants) increased from 11 percent to 29 percent as a proportion of the federal share;

   b. indirect assistance (for example, veteran's benefits) decreased from 34 percent to 22 percent as a proportion of the federal share; and

   c. direct plus indirect assistance increased 21 percent in constant dollars.

3. Payments to institutions for research increased 24 percent in constant dollars.

The State and Local Share. The states, with modest help from local governments, have traditionally been responsible for the basic educational services that are to be supported with public monies. Thus, it was the states that had the primary responsibility for funding the enormous increase in the size of public higher education in this century. State and local support for higher education is predominantly a matter of payments to institutions for both current operations and capital outlays. Explicit student aid, that is, monies earmarked for students, increased dramatically during the 1970s but still constituted a rather small portion of all state and local support by the end of the decade. As in the case of the federal government, state and local governments also provide financial support in forms other than direct outlays. State income taxes and state and local sales and property taxes typically contain provisions that reduce the cost of higher education to the institutions, private donors, and students and their families. In addition to tax expenditures, other forms of support include the implicit rent on, and the depreciation of, the physical assets belonging to public higher education. Of the cost of higher education born by state and local governments, the proportion due to

these non-outlay forms of support is nearly twice that on the federal side.

The important data problems for this segment are a function of the various estimates that need to be made in order to capture the full economic cost of higher education born by state and local governments. Tax subsidies, implicit rents, and depreciation all involve rate estimates that are subject to considerable error. Furthermore, there is some controversy about which, if any, tax expenditures to include. The approach taken here follows that of Schultz (1960) and Cohn (1979) in including the subsidies built into income, sales, and property taxes. On another controversial matter, some analysts argue that outlays for physical assets should not be considered as part of annual costs, thereby limiting capital costs to depreciation and implicit rent. For the present study, however, it seemed more appropriate to follow Blitz (1962), Machlup (1962), and Cohn (1979) in including capital outlays as an annual cost along with depreciation and implicit rent, a procedure that is more consistent with the desire to include all opportunity costs.

From FY73 to FY80, the following changes occurred in the financial support given to higher education by state and local governments:

1. For current operations

   a. state appropriations increased 124 percent in current dollars, 35 percent in constant dollars (CPI);

   b. local net expenditures increased 113 percent in current dollars and 28 percent in constant dollars (CPI), equalling a little more than one-fifth of state appropriations across the period; and

   c. state appropriations plus local net expenditures increased slightly as a percent of all state and local purchases of goods and services -- to just under 7 percent of the total.

2. The state and local share as a percent of the total cost of higher education increased slightly from 37.4 percent to 38.0 percent.

3. Tax expenditures increased in value from $2.2 billion to $4.3 billion, a 19 percent increase in constant dollars (CPI);

property tax exemptions accounted for about three-fourths of total tax expenditures for higher education.

4. Among capital costs

   a. capital outlays declined 37 percent in constant dollars (Boeckh index), and

   b. implicit rent jumped dramatically — 54 percent in constant dollars — in accord with sharply higher interest rates (Boeckh index).

5. For all costs born by state and local governments the proportion going to current operations increased from 54 percent; the capital-cost portion declined from 35 to 30 percent; the tax expenditures portion stayed at 11 percent.

Voluntary Support. From its inception, higher education in the United States has depended to some extent on voluntary contributions. The enormous growth during this century of publicly supported higher education brought with it a diminished role for voluntary support — at least with respect to higher education as a whole. Nonetheless, voluntary support remains an essential ingredient of the funding picture for certain types of institutions. Furthermore, when the financial or the political scene at the state or federal level becomes less favorable, public institutions as well as private institutions turn increasingly to voluntary contributions — to maintain quality if not for survival itself.

Federal and state governments have encouraged voluntary support to higher education instititions. By allowing income tax deductions for individual and corporate contributions to colleges and universities, both levels of government have become partners in the voluntary support activity. Based on the estimates used herein, it appears that the government contributed about one-third of the total amount of voluntary support received by the nation's colleges and universities from FY73 to FY80. In other developments during that period, voluntary support for higher education 1) rose from $2.24 billion to $3.8 billion, an increase of 70 percent in current dollars but only about 2 percent in constant dollars (CPI); 2) grew faster for current operations than for capital purposes; and 3) typically covered about 5 percent of E&G expenditures (all institutions). Among the donors, alumni and foundations contributed the largest amounts; together, they contributed almost one-half of the total in FY80.

Contributions from business corporations grew the fastest — by a wide margin.

Institutional Share. Institutions of higher education typically have some financial resources of their own to devote to current operations; that is, resources beyond those made available in a given year by governments, students, and voluntary support. For present purposes, the revenues from the following institutional sources were summed to yield the values for the institutional share: earnings (excluding capital gains or losses) on endowment, sales and services of educational activities (those activities that are incidental to the primary functions of instruction, research, and public service, such as university presses and testing services), and "other sources" such as the sale of computer time and interest income and gains (net of losses) from short-term investments of unrestricted funds.

Both public and private institutions contribute in the above sense to the revenue needed for current operations. Private institutions contribute to the overall funding of higher education in other ways as well: they use up physical capital (in the sense of depreciation); they devote physical capital to higher education instead of to some other endeavor (the opportunity cost recorded as implicit rent); and they construct or purchase new physical capital to devote to higher education. Similar costs are incurred by public institutions, but their capital-related costs have already been accounted for as part of the share attributable to state and local governments.

From FY73 to FY80, the institutional contribution to the funding of higher education rose 105 percent in current dollars and 23 percent in constant dollars and constituted about 8 to 9 percent of the total cost of higher education. The portion of the institutional share attributable to current operations constituted about 5 to 6 percent of E&G expenditures at public institutions compared to about 14 to 15 percent at private institutions.

The Student-Family Share. Students contribute to higher education funding in several ways. Most notably, they forego earnings while investing in their own human capital. Second, they pay tuition and fees that help to offset costs of instruction. Third, they purchase books and supplies. Fourth, they pay for room and board and for transportation and other such expenses. In a strict accounting sense, only those living expenses that are in addition to normal living expenses can be assigned to higher education. The remainder would be incurred regardless of the individual's selection of work, home-

making, military service, idleness, etc. In this report, only expenses for tuition, fees, books, and supplies are included because it could not be established that living expenses were different, on average, between students and comparable non-students.

Direct costs for all students were estimated as follows. Total (assessed) tuition revenues for all institutions were obtained from HEGIS. Expenditures for books and supplies were calculated by multiplying the average expenditures for a full-time student by the total number of full-time-equivalent students. Total assessed tuition and fees added to total expenditures on books and supplies yielded total direct costs. To obtain net direct costs, the total amount of assistance to students and their families was subtracted from total direct costs. The amount of assistance was determined by combining student-reported data with government budget data on assistance programs (including veterans' and social security benefits) and tax subsidies.

Indirect costs, or foregone earnings, for undergraduates were calculated following an approach developed by Crary and Leslie (1978). Foregone earnings of graduate students were estimated by taking a multiple of undergraduate foregone earnings, based on the difference between the after-tax earnings of high school and college graduates.

Note that both direct and indirect costs are estimated conservatively in this report. The concept of direct costs employed here is restrictive, the concept of financial assistance is broad, and the procedure used to estimate foregone earnings yields results that are lower than those estimated by Schultz (1960), Becker (1964), and others.

The period 1973-1980 witnessed the following in regard to student and family costs of higher education:

1. The total net costs to students and their families

   a. increased 105 percent in current dollars, from $17 billion to $35 billion, or 13 percent in constant dollars (CPI) (student FTEs rose 18.3 percent) and

   b. constituted one-third of total higher education costs.

2. Average total net costs for full-time undergraduate students

increased 68 percent in current dollars from $2600 to $4380 per year, a decrease of 7 percent in constant dollars (CPI).

3. Average total net costs for full-time graduate students increased 83 percent in current dollars, from $3890 to $7120 per year, an increase of just 1 percent in constant dollars (CPI).

Total Cost of Higher Education. In this concluding segment, total net contributions to the financial support of higher education are summarized. The data are meant to provide background information for a fundamental policy issue in higher education finance — who should pay what share of the costs? Whatever the answer to that value-laden question might be, it is apparent from the data shown in Table 1 that nothing much changed during the period from FY73 to FY80. The most noticeable trend was a gradual decline in the federal share after 1975, this despite large increases in funding for certain types of highly visible student-aid programs. Otherwise, the predominant features of the cost distribution remained about the same: state and local governments carried the heaviest share, nearly two-fifths of the total, while students and their families contributed about one-third and the federal government less than a fifth of the total.

Total costs can be disaggregated in another way. Table 2 shows the distribution between direct and indirect costs and several subcategories of each. The cost of operations remained at just over 45 percent of total costs; the next largest was foregone earnings at around 30 percent of total costs. The gap between direct and indirect costs declined a few percentage points, but direct costs still constituted just over one-half of total costs at the end of the period.

Overall, the data in this concluding segment suggest that the status quo was pretty well maintained over the period analyzed. It appears that the distribution of costs among those who support higher education did not change appreciably and that higher education as a whole continued to receive about the same share of national resources (just under 4 percent of the GNP). The record against inflation is more ambiguous; much depends on how the adjustment is made. Measured by the HEPI, total support for higher education in constant 1973 dollars rose more than 21 percent. Measured by the CPI on a per FTE-student basis, total support was down by about 6 percent. Perhaps the most appropriate measure is to use the HEPI on a per FTE-student basis, in which case total support just does keep ahead of inflation — by 2 percent or so. Perhaps that statistic sums it up

best; 1973 to 1980 was a time when, in the aggregate anyway, higher education held its own — an achievement that may look better and better as we move through the 1980s.

Table 1. Total Cost of Higher Education, by Source, FY1973-80 (Millions of Dollars and Percentage Shares).

	1973	1975	1977	1979	1980
Federal Government[a]	$ 9,210	$12,350	$13,830	$15,570	$ 17,630
	(17.9%)	(18.6%)	(18.1%)	(17.3%)	(17.0%)
State and Local Government	19,190	25,500	29,560	34,700	39,420
	(37.4)	(38.4)	(38.7)	(38.6)	(38.0)
Voluntary Support	1,470	1,400	1,775	2,050	2,500
	(2.9)	(2.1)	(2.3)	(2.3)	(2.4)
Higher Education Institutions	4,395	5,955	6,060	7,340	9,205
	(8.6)	(9.0)	(7.9)	(8.2)	(8.9)
Students and Family	17,080	21,270	25,105	30,220	34,950
	(33.3)	(32.0)	(32.9)	(33.6)	(33.7)
Total[b]	$51,345	$66,475	$76,330	$89,880	$103,705

a When grouped in this fashion, the federal government's share is overstated in the sense that a small portion of federal dollars go to students who are not part of "higher education" in the limited meaning of the term, namely, the HEGIS universe of colleges and universities. To a lesser extent, this is also true for the state government's contribution. Any overstatement of the federal contribution, however, is probably more than matched by underestimates built into the figures shown (see Finn, 1978, pp. 10 - 11, notes d and u).

b These figures can best be interpreted as referring to the limited meaning of "higher education" appropriate to the HEGIS universe. While federal aid going to students outside the HEGIS universe is included, this assistance, as mentioned in footnote a, is used as an offset against the HEGIS-derived costs incurred by students and their families. Some of the state funds included here also flow to students and institutions outside the HEGIS universe, but the amount of money is likely to be quite small in the aggregate.

Table 2. Total Cost of Higher Education by Type of Cost, FY1973-80 (Percentage Shares)

	1973	1975	1977	1979	1980
Direct Costs					
Operations	46.7%	44.5%	46.1%	45.8%	45.5%
Capital	8.3%	7.0%	6.8%	6.2%	6.6%
Subtotal	55.0%	51.5%	52.9%	52.1%	52.1%
Indirect Costs					
Tax Expenditures[a]	4.7%	4.6%	4.9%	4.9%	4.9%
Depreciation	3.3%	3.0%	3.1%	3.0%	2.8%
Implicit Rent	7.9%	10.8%	8.6%	9.0%	9.6%
Foregone Earnings	29.1%	30.1%	30.4%	31.0%	30.6%
Subtotal	45.0%	48.5%	47.1%	47.9%	47.9%
Total Costs	100%	100%	100%	100%	100%

a Tax exclusions only; parental personal exemptions and deductions for corporate and individual contributions have been included under direct costs.

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CHAPTER 28

Enhancing Institutional and Program Quality

*Clifton F. Conrad**

Judging by the outpouring of articles in both scholarly and popular journals, "quality" has rapidly emerged as perhaps the critical issue confronting higher education in the 1980s. It may be, as Harold Enarson has implied (1982b), that concern about quality is little more than higher education's most recent *cause célèbre*. More likely, the current fascination with quality indicates at best a widespread commitment to the revitalization of the higher learning, at worst an indifference masquerading as genuine concern.

Whatever the long-term consequences of the spirited public and private dialogue, there seems little doubt that we are in the midst of a period of introspection concerning the purposes and performance of higher education. Just as middle age brings about an assessment of life-span accomplishments, so retrenchment has encouraged us to re-evaluate our priorities in higher education. The period of expansion has ended; contraction seems to be our middle-age task, and quality may be our *passepartout* — our key to the future.

Asking if we in higher education should be concerned about quality is like asking if we should ponder middle age; if we do not do anything about it, time will pass taking its rightful toll. But if we do decide to act — to evaluate institutional programs and activities, to modify our course — then perhaps we can enter the next age with greater potential for an enhanced life's work. For those concerned about higher education, the signs of decline may already be here: grade inflation, declining faculty morale, lowered graduation standards, a loss of public confidence. The challenge for all of us is to commit ourselves to meaningful and concerted efforts to define, assess, and promote quality in hopes of replenishing the present and the future of the higher learning.

Middle age has a surreptitiousness about it; we seldom feel the signs of middle age, no less do we read them. Reality often strikes

**With the assistance of Judy Grace*

Dr. Clifton F. Conrad is Associate Professor, Center for The Study of Higher Education, University of Arizona.

when an external source points the way — a long mirror glanced at by chance, a college chum's off-hand remark about our raquetball game. So it seems to be with higher education quality; outsiders often see the shifts before insiders. In terms of quality assessment, there is a long history of extra-institutional approaches that precourse more recent institutional initiatives. Extra-institutional perspectives tell us much about how quality has traditionally been and continues to be addressed in higher education, so we begin our discussion with a review and critique of the three major extra-institutional approaches to assessing institutional quality. Following that, we critically examine current institutional approaches to assessing and improving quality. Finally, based on our analysis of the limitations of both extra-institutional and institutional efforts, we propose a broad framework to help guide efforts aimed at enhancing institutional quality.

Extra-institutional Perspectives

Much of the current interest in quality has come from various outside publics who are understandably interested in maintaining quality in higher education. These publics include the states, accreditation agencies, and scholars who conduct reputational studies aimed at rating or ranking academic programs — all providing external and summative evaluations of quality in higher education. A look at these three perspectives reveals that external attempts to assess quality have been repeatedly hindered by some serious limitations.

The most recent type of extra-institutional assessment of quality in higher education comes from the states by way of statewide program review. Within the last two decades, as financial and political pressures for the efficient and effective use of public funds have mounted, there has been a dramatic increase in the number of states with higher education coordinating boards that have program review authority over both new and existing programs. Although not all states with legal review authority have so far chosen to exercise that authority, approximately twenty-eight state-level agencies have authority to review at least some existing programs (Barak, 1981). In the remaining states, review authority may be exercised by other means such as legislative budget reviews.

In the light of the possible consequences of statewide actions on institutional quality, it is significant that quality has not become a central consideration in many statewide program reviews. Of the states that currently conduct program reviews or that have established procedures for review, the most frequently used criteria are

costs, productivity, and the compatibility between program and institutional mission. Only about one-third of the states involved in program review explicitly consider program quality in the review process (Barak and Berdahl, 1978).

If quality has not emerged as a central criterion in many statewide program reviews, there are nevertheless indications from many states that quality considerations are beginning to assume a more prominent role. But how is quality being assessed? In general, most states are embracing a traditional view of quality, taken largely from the academy, a view that focuses on resource variables and input variables (such as student characteristics and faculty qualifications). Little attention is being placed on the outcomes of educational experiences, quantitative indicators of quality are being utilized at the expense of qualitative indicators, and unidimensional definitions of quality are linked to the application of narrow criteria in evaluating for quality. Most statewide approaches are simply adaptations of traditional approaches to examining quality, and quality assessment at the state level remains anchored to the limitations of those approaches.

Accreditation and Quality

While state program review is the newest form of quality assessment, accreditation is the oldest form of formal quality assessment. Today there are six voluntary regional associations with nine commissions, over seventy professional associations, four institutional based associations, and several voluntary consortia that are actively involved in accreditation at both the undergraduate and graduate levels (Harcleroad, 1981). Not only is accreditation a prerequisite for participation in federal-aid programs for both institutions and students, but it is also a widely employed barometer of institutional and program quality within and outside of higher education.

Especially in the last decade, the accrediting community has been active in asserting the relationship between quality and accreditation. For example, Kenneth Young, the immediate past president of the Council on Postsecondary Accreditation (COPA), states the common view: "Accreditation is a process that attempts to evaluate and encourage institutional quality" (cited in Lawrence and Green, 1980, p. 43).

In evaluating quality, most accrediting agencies have relied primarily on criterion-referenced assessment in which performance is

judged against institutional and program objectives and/or other mystical touchstones. In practice, accreditation operates like a "pass/fail system" (Solmon, 1981, p. 7): either the goals of a program are clearly stated and appropriate to its mission or they are not; either there are adequate resources to carry out program objectives or there are not, and so on. By implication, institutions and programs which are accredited are taken to be of higher quality than those that are denied accreditation status. Not without justification, this "pass-fail" system has been severely criticized because it tells us little about the relative effectiveness of programs — either in terms of institutional and program objectives or external criteria.

No less important, the accrediting community has been justly criticized for its lack of agreement on a definition, much less the attributes and most appropriate indicators, of program quality. After reviewing the published standards and guidelines of both regional and professional associations, one researcher concluded that "there is such a wide varitey (of standards) among agencies that almost any blanket conclusion or generalization is suspect" (Petersen, 1978, p. 306). Moreover, as in statewide program review, other pointed criticisms can be directed at the efforts of accrediting bodies to evaluate quality: a) quantitative indicators are often used to the exclusion of qualitative ones and b) judgments about quality are based largely on inferences about resources and input variables (such as students' characteristics) at the expense of systematic evaluations of what an institution or program does with its students, faculty, and other resources.

Reputational Studies

Finally, we come to reputational studies, the most visible approach to quality assessment in higher education. The precedent for this approach dates from two widely publicized studies by Raymond Hughes in 1925 and 1934. These two studies not only established faculty quality as the central criterion in the assessment of program quality but fixed the research aperture on the evaluation of doctoral programs. In the Hughes' studies as well as those that have followed (Cartter, 1966; Keniston, 1959; Ladd and Lipset in Scully, 1979; Roose and Anderson, 1970), the major focus has been on evaluating graduate programs in institutions with high national visibility. The most recent example is the reputational study of doctoral programs in thirty-two disciplines conducted by a committee appointed by the Conference Board of Associated Research Councils. Only in the last decade have there been reputational studies of both

professional program quality (cf. Blau and Margulies, 1974-1975; Cartter and Solmon, 1977) and undergraduate program quality (Johnson, 1978; Solmon and Astin, 1981).

The most salient characteristic of reputational studies is the emphasis placed on peer evalutation in which judgments of program quality are made by faculty raters and/or by other experts such as department chairpersons, deans, and professional association and agency officers. In short, all reputational studies share the common assumption that it is experts in the field who are best qualified to make assessments of program quality. Further, reputational studies follow a similar procedure: one or more criteria (such as faculty quality) are chosen to serve as a basis for evaluation, a panel of experts is employed to rate programs on the basis of the chosen criteria, and then individual panelists' responses are combined in order to generate a ranking or rating of programs by institution (Blackburn and Conrad, 1982). Although several recent studies — especially at the undergraduate and professional school levels — have utilized more diverse groups of raters and broadened the rating criteria, the general path cut in the earliest studies of emphasizing narrow criteria and highly restricted groups of raters has persisted.

Since reputational assessments figure so prominently in the literature on quality, they have attracted considerable comment and criticism (Blackburn and Conrad, 1982; Lawrence and Green, 1980; Conrad and Praff, 1983). In brief, many of the criticisms aimed at reputational studies have been methodological, including concerns about rater bias and the extent to which most raters are sufficiently well-informed to make judgments about the quality of programs at other institutions. Moreover, the narrowness of criteria used to assess quality in most reputational studies has been justly criticized. Significantly, scholarly achievement of the faculty has been the major yardstick used to assess quality in most studies, despite attempts in several recent studies to broaden the criteria base (Solmon and Astin, 1981; Conference Board of Associated Research Councils, 1982). By reifying the criterion of faculty quality, most reputational studies have ignored other important evaluative criteria such as program and teaching effectiveness.

The examination of all three major external approaches to quality assessment — statewide program review, accreditation, and reputational studies — reveals serious flaws in past and present approaches to evaluating quality in higher education. Besides various methodological concerns, such as questions of rater bias and rater competency,

other more substantive criticisms should be raised. Perhaps most important, extra-institutional assessments have, with few exceptions, used limited and narrow criteria to evaluate quality (Kuh, 1981). Statewide program reviews, accreditation studies, reputational studies — all have emphasized inputs and resources (such as faculty qualifications and library holdings) and products (such as faculty scholarly productivity and achievement of program graduates) in varying degrees. To be sure, inputs and products can provide a partial foundation for making judgments about what quality looks like. But such an exclusive reliance on inputs and products can also induce a complacency about subtler, yet equally vital, questions of quality (Conrad and Pratt, 1983). Questions about the **process** — such as what is the quality of teaching and learning; what is the degree of intellectual excitement, civility, and humaneness among students, faculty, and staff; and what does a program or institution actually contribute or "value-add" in terms of student growth and development? — should also form the basis of any evaluation and design for quality. When the reductionist approaches of most extrainstitutional studies are coupled with a limited range of quantitative or qualitative indicators, they yield only an incomplete rendering of quality. In short, a holistic view of and approach to assessing quality is sacrificed to unidimensional perspectives which have been wedded to limited criteria and narrow, usually quantitative, indicators of quality.

Consequences of Assessments

Finally, and perhaps most important of all, it is imperative to reflect on the consequences of extra-institutional assessments in terms of the improvement of quality. Consider that all three of the major external forms of assessment are essentially a "pass-fail" approach in which programs and institutions are "labeled": either a program "passes" a statewide program review or it does not, either a program receives accreditation or it does not, either a program receives a high rating or ranking (or even a ranking or rating at all) or it does not. What are the consequences of this "labeling" process for the enhancement of quality throughout academe?

For those programs and institutions which fare well on outside assessments, external validation may invite inertia and complacency. Just as the Greek poets warn us of the dangers of *hubris*, we fear that external confirmation of program worth may lead to an exaggerated pride for which the retribution exacted is a dimunition of excellence. For those programs and institutions in which assessments fail to meet internal expectations, outside assessments may lead, on the one hand,

to despair or cynicism and, on the other hand, to short-term actions — hiring faculty from the ranks of Nobel Prize winners to increasing the amount of laboratory space for graduate students. To be sure, extra-institutional assessments — whether or not they meet institutional and program expectations — may encourage some considerable efforts to improve quality. Still, the more telling point may be that the emphasis on "labeling" programs — as well as the failure to place much emphasis on identifying program strengths and weaknesses as a basis for improvement — militates against widespread institutional efforts aimed at the ongoing evaluation and improvement of quality.

In summary, not all of the above criticisms can be equally applied to all three forms of extra-institutional assessment. Especially in recent years, for example, accreditation studies have more explicitly embraced formative evaluation, and at least one state (Tennessee) has moved beyond the confines of traditional assessment approaches by including "value-added" assessment in its evaluation design and budgeting system. Nevertheless, we do not retreat from our criticism of extra-institutional approaches, for thoughtful criticism of outside perspectives on quality is overdue. Significantly, these external perspectives continue to have a profound impact on the way we view and assess quality, and they likely have major consequences for what actions we take — and do not take — in our institutions. In short, we must not lull ourselves into an uncritical acceptance of the approaches and findings of these external assessments; at best they should provide only a point of departure for the assessment and improvement of institutional and program quality throughout higher education.

Institutional Perspectives on Quality

Concern about quality is a prominent theme in the history of American higher education, and efforts to evaluate quality can be traced as far back as seventeenth-century Harvard and William and Mary. But it is an historical fact of no small significance that self-evaluation as a basis for program and institutional improvement has only rarely been undertaken in academe. Today there still seems to be a reluctance on the part of many colleges and universities to embrace the complementary issues of quality assessment and quality enhancement. Nevertheless, a growing number of institutions are engaging in quality assessment as a foundation for improvement. Faced with major financial constraints, institutions involved in the evaluation of quality are largely doing so within the context of overall financial planning. Quality has become a major criterion in the

distribution of limited resources in which the over-arching questions posed by institutions are 1) what programs, if any, should be discontinued? and 2) what should be the level of program support? Within this financial planning context, institutions are using one or both of two general approaches: evaluation for purposes of resource allocation and program review. Each approach will be briefly reviewed, followed by a more extended discussion of their limitations.

For the next several decades, almost all institutions are faced with the financial constraints of retrenchment. While efforts are bolstered to maintain and increase outside support, there still is the persistent need to effectively allocate existing resources. Many institutions have opted for across-the-board cuts, but others — in the belief that such cuts ultimately will have negative consequences — have utilized various evaluation processes to distribute limited resources. In order to maintain or improve quality concurrent with stable or declining support, these latter institutions are choosing to limit the scope of their offerings through evaluation processes which are linked to the reallocation of institutional resources (Massey, 1981). Such an approach conjoins evaluation, planning, and budgeting in order to enhance strong or promising departments and programs at the expense of weak and unpromising ones. It is, quite simply, a strategy of triage: "feed the strong, and starve the weak."

There is a wide range of institutional approaches to designing for quality through adjustments in budget allocations. Some institutions, such as Stanford University, evaluate quality within the context of their own long-range financial planning models or through models developed by such organizations as the National Center for Higher Education Management Systems (NCHEMS). Other institutions eschew planning models and, in some instances, do not even establish a formal process of assessment. In some institutions, quality is the central criterion in program evaluation, while in others it comes secondary to such factors as demand and cost. In terms of the actual assessment of quality, there are also widespread differences across institutions. Some rely heavily on quantitative indicators; others prefer qualitative ones. Some emphasize resource and input variables; others emphasize outcomes. These differences notwithstanding, there is one common denominator across most evaluation processes: a marked tendency to pattern assessment designs after the major extra-institutional approaches to assessing quality.

The Program Review Process

The most recent, and currently the most visible, approach to quality assessment and improvement is through the program review process. Within the last several years, some of the nation's most prestigious institutions — Duke, Michigan, and Vanderbilt — have undertaken major program reviews. Most program reviews follow the same general procedure (Dougherty, 1981). First, one or more programs are targeted for review which are perceived as being relatively unproductive, less central than other programs to the mission of the institution, and lower in quality. Second, these programs are assessed in terms of guidelines established by the institution. While there are some sharp differences across institutions in terms of guidelines for program review, highly traditional approaches to program evaluation in general and quality in particular cut across almost all program reviews. Third, a decision is reached with regard to the maintenance or the discontinuance of each program under review. The purpose of program review is straightforward. Stronger programs — those which are considered to be more productive, to be of higher quality, to be more central to institutional mission — are retained and financially rewarded; weaker programs are denied funding increases or are eliminated. The short-term effect is to bolster financially those programs considered to be of high quality at the expense or elimination of lower-quality programs. The intended long-term effect is that program quality will be preserved, even enhanced, because the financial integrity of programs taken to be of high quality has been assured.

That some institutions have gone beyond across-the-board cuts to adopt new strategies for resource allocation suggests that questions about quality are moving to the forefront in many colleges and universities. Reconciling quality and scarce resources, whether through adjustments in budget allocations or program review, seems to clearly represent a genuine commitment to nurture quality in the higher learning within the financial constraints of the foreseeable future. Indeed, the signal being sent from many institutions is that those who would pursue quality must no longer stay aloof from the resource allocation process. Yet while we applaud this sentiment, some serious questions must be raised about what is being done — and what is not being done — at the institutional level to preserve and enhance quality.

Some Major Design Weaknesses

What are the major weaknesses of current approaches to designing for quality? Perhaps most important, most institutional approaches are limited because they are based largely on the traditional approaches to evaluation used in extra-institutional approaches to assessment. Since those approaches have been criticized above, suffice it to say here that most institutional approaches have sacrificed a holistic view of quality and quality assessment to unidimensional perspectives, narrow assessment criteria and, in many cases, highly questionable indicators of excellence. To be sure, some institutions (such as Duke University and Stanford University) have, either through program review or through evaluation for purposes of reallocating resources, adopted designs for quality assessment that overcome many of the limitations of extra-institutional assessment strategies. But for the majority of institutions, the clear tendency is to rely heavily on traditional strategies.

Relatedly, almost all institutional efforts to assess quality are exclusively summative. Evaluation aimed solely at reaching summative decisions about the future of programs is very threatening to administrators, staff, and faculty — those who share responsibility for preserving quality. Ironically, it may even work against quality enhancement by lowering faculty and staff morale. Moreover, the exclusive reliance on summative evaluation means that not enough attention is paid to the relative strengths and weaknesses of programs and, more important, the ways in which they might be improved. It is no wonder that the "pruning" of program review and resource reallocation often seems to produce so little new growth; they are regarded by many as "axmanship" performed solely in the interest of "reforestation." With too few exceptions, no formative evaluation exists — no conscious design for improving quality beyond insuring that programs considered to be of high quality and importance receive sufficient resources.

It follows that our fundamental concern about most institutional efforts to address quality relates to the widely shared assumption about the relationship between financial resources and program quality. By linking quality assessment exclusively to current and future resource allocation, institutions are indicating that the maintenance and enhancement of program excellence is primarily dependent on financial resources. Money has come to be viewed as the *sine qua non* of quality.

What is the relationship of money to quality? Most of us are firmly convinced that financial resources are necessary for program quality, and several researchers have found a positive, though small, relationship between expenditures and educational outcomes (cf. Bowen, 1980, p. 288). Since money can provide certain things — better laboratories and libraries, support for faculty service and research, lower student-faculty ratios — seeking the best ways and means of expending limited resources must clearly be a part of any sensible approach to designing for quality.

While money can and does make a difference, have we not perpetuated a dangerous myth when we suggest that money is not only necessary but also sufficient? As reported in his book, *The Costs of Higher Education*, Howard Bowen has found that "affluent institutions could perform as well, or nearly as well, with less money (and) many institutions could achieve greater results with the same money .... Increases in affluence do not automatically result in improvements in performance" (Bowen, 1980, pp. 166-167). Although they are not disposed to admit it, many faculty and administrators in the trenches know they can perform as well with less money. Indeed, there are many things that money cannot buy: an active commitment to quality is but one of those things (Conrad and Pratt, 1983).

Because financial resources are not, by themselves, sufficient to ensure quality, we must recognize that current approaches to assessing and improving quality are inherently limited. While we must decidedly attend to the wise distribution of our limited resources, we must not be content to stop there. We must also recognize that the maintaining and the making of quality remain, at bottom, an ongoing process for the people laboring toward that end. As such, efforts aimed at enhancing quality must extend far beyond the resource allocation process. To continue to approach quality primarily through the resource allocation process is for all of us — faculty , administrators, staff, and students — to absolve ourselves of full responsibility for insuring excellence throughout higher education.

Designing for Quality

Past and current approaches to quality assessment and improvement — both extra-institutional and institutional — have told us much about how to address quality. Yet the time has come for institutions to acknowledge that designing for quality must reach beyond the limited designs of current external and internal assessments; must be more than a justification for resource allocation

decisions; and, most importantly, must address the genuine concerns about quality that have become graver in these times of retrenchment. There are too many outside forces calling for the assessment and improvement of quality for us to be indifferent. We who are ultimately answerable for the quality of our programs and institutions must assume more fully the responsibility — and the opportunity — to both preserve and enhance quality. In this spirit, we propose that individuals, programs and entire institutions engage in self-regulation and self-monitoring of quality through ongoing assessment and action.

The idea of engaging an entire institution — at all levels - in designing for quality independently of resource allocation decisions may be an idealistic notion. To extend this framework, it is helpful to refer briefly to the practice of worker-based quality enhancement as developed by Japanese industry. Following World War II, some very large Japanese industries decided to compete with the United States solely in terms of the quality, not the quantity, of manufacturing and industrial goods. Japanese products would be of higher quality and would be built to last longer (Hodgkinson, 1981). The key then and now to this emphasis on quality is the idea of "quality circles" as utilized in Japanese participatory decision-making. Simply stated, "quality circles" are groups of workers organized to evaluate and discuss the improvement of a particular product. Such circles have been credited with the superior finishing and performance of a number of Japanese products (Nicholas, 1982).

Despite their apparent success, there are several good reasons why Japanese "quality circles" probably should not be adopted outright by American colleges and universities. Perhaps most important, the Japanese approach of linking "quality circles" to management would likely undermine the professionalism and autonomy of staff and faculty alike. Moreover, it would be difficult to reach agreement on the meaning and measurement of quality in regard to many of our "products." Nevertheless, we all should seriously consider the concept of worker-based quality enhancement that lies behind the Japanese design. An appropriate design for quality must come from within those individuals, programs, and institutions involved most directly with the formation and preservation of quality.

In our view, then, the idea of individuals and groups working together should be the main feature of a formative design for quality. As a first step, each faculty and staff member, each program, and each institution should be encouraged to address quality — to evaluate and

improve quality by means of conscious designs. Besides individual initiatives, department, school, college, and institution-wide efforts might lead the way. Especially when they are decoupled from resource allocation decisions, group approaches to decision-making have been remarkably effective in American higher education. Many faculties are still governed largely through consensus, and many institutions (such as the University of Akron) have utilized team leadership to solve departmental and institutional problems. Approaches will and should differ from one institution to the next; the important point is that existing or new structures be selected which will maximize thoughtful discussion of and action about quality.

Systematic Self-evaluation

The important point of departure for discussions about quality is for both individuals and groups to engage in systematic self-evaluation. In order to go beyond previous efforts, evaluation efforts should draw from the limitations as well as the strengths of previous extra-institutional and institutional assessments. Moreover, they must resist the tendency to reach judgments about quality on the basis of incomplete designs which are based on little more than rumor and uninformed opinion. Building upon our earlier critique of current approaches to evaluating quality, we would make several suggestions. Most important, systematic and holistic approaches must be employed in which multidimensional definitions of quality are reflected in appropriate criteria for evaluation. Concurrently, designs should encompass inputs, outcomes, the educational process, and the integrality of all these elements. Finally, formative designs for quality should utilize a range of both quantitative and qualitative indicators consistent with shared understandings concerning the meaning and the measurement of quality.

The key point in designing for quality is just that — designing, developing a formative framework which seeks to improve quality and not merely to summarize it for purposes of reward — whether that reward is status, accreditation, continuance, or increased financial support. All of us — faculty, staff, administration — have little use for autopsies of where we have failed quality, no need for more ex-cathedra utterances of past sins. Instead, hope and encouragement are needed which are built upon both individual and shared commitment to excellence. Designs for quality that identify program strengths and weaknesses, as well as point the way toward quality improvement, may go a long way toward renewing that commitment.

Today, most administrators and faculty are understandably concerned about resource acquisition and efficiency. But too many decisions are being made for short-term survival, rather than long-term planning for enriched educational experiences. Decisions about faculty and staff utilization, planning for program cutting, recruitment and retention of students are receiving far more attention than the quality of the educational process. To the extent that we have looked at quality, it has almost always been within the context of summation of the status quo. As we head further into the 1980s, we may pay a heavy price for using evaluation only to discontinue or dismember programs, displace faculty and staff, and discourage public confidence in the future.

In conclusion, the improvement of quality in higher education should no longer be tied exclusively to financial planning. At bottom, the question of quality is not simply one of the wise investment of financial resources but rather of moral ones (Enarson, 1982a). We can no longer hold quality as the central element of the higher learning and, at the same time, tolerate both individual and institutional indifference to quality. In the words of the unorthodox Zen Buddhist, Robert Pirsig, we will "all grow toward Quality or fall away from Quality together" (1974, p. 325).

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CHAPTER 29

Budgeting Myths and Fictions: The Implications for Evaluation

Cameron Fincher

We believe many things about budgeting in higher education that are not true. We accept uncritically many other half-truths that may not serve us well.

The purpose of this paper is to look closely at a dozen or so budgeting myths that have emerged or evolved in the past twenty years — and to examine critically the budgeting fictions that often determine the allocation of public resources in the higher education enterprise. A third purpose will be met if attention can then be turned to the role that budgeting myths and fictions play in our compulsive concern with institutional, program, and faculty evaluation.

To use terms like "myth" and "fiction" in a discussion of mundane matters like budgets, it will help if we accept a sociological definition of myth as "a collective belief that is built up in response to the wishes of the group." Fiction should be defined simply as "something invented by the imagination or feigned." Neither myths nor fictions are genuine or real — as some of us would use those terms — but they are often reified. In brief, myths and fictions are abstractions which we treat as material or concrete. They can be highly useful in the sense that they have "organizing value" — a term used by the novelist Mark Schorer in writing about the poet William Blake (Schorer, 1960).

In applying such terms to budgeting, another proviso is in order. Budgeting as a process and the budget as an authorizing document will pertain mostly to institutions of higher education, their subdivisions, or their budgetary units. What is true or "untrue" at the institutional and program levels may be quite different at the levels of a statewide system of public higher education, a board of trustees for a private college, and a senate or house finance committee. The myths and fictions discussed here are less lofty. To emphasize the point, this paper has little to say about public or private financing and funding, the negotiations of educational leadership and elected officials, or the

Dr. Cameron Fincher is Regents Professor of Higher Education and Psychology Director, Institute of Higher Education, University of Georgia.

"politics of budgeting" at national and state levels[1]. Nor is there any intent to replow the fallow fields of PPBS and ZBB.

Budgeting Myths

A list of budgeting myths has been assembled in Table 1. An effort has been made to state each myth succinctly — without distorting unduly the expression of that particular belief in published articles and monographs on budgeting. The myths themselves have been drawn from publications because oral discussions of budgetary matters at departmental, divisional, and institutional levels have never been articulate — and they are often unintelligible. In faculty councils institutional budgets are too often administrative arcanum; in administrative councils, too many administrators are anxious to keep it that way.

Even a casual reading of the myths listed in Table 1 will suggest that they are not mutually exclusive — and they are not meant to be exhaustive. Some — Number Two and Number Four, for example — may be contradictory. Others — Number Five and Number Six — may duplicate each other or overlap needlessly. All, however, have one thing in common: They are basically — for the most part and in most institutions of higher education — untrue! Yet, each is a stated belief or advocated principle that can be read with appreciable frequency in the published literature of budgeting[2].

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[1] The classic treatment of budgeting as a political process, of course, is Aaron Wildavsky's *The Politics of the Budgetary Process* (Little, Brown, 1972). Anyone reading about budgeting will encounter Wildavsky's later writings that continue in the same vein. The tenth myth listed in Table 1 is "pure Wildavsky."

[2] The Committee for Economic Development initiated some of the "mythical thinking" about college and university budgeting in their publications: *Budgeting for National Priorities* (1966) and *The Management and Financing of Colleges* (1973). Most of the myths identified, however, are drawn from the management literature on budgeting as well as articles and monographs on budgeting. An excellent source is H.W.A. Sweeny and Robert Rachlin (Eds.) *Handbook of Budgeting* (Wiley, 1981). In choosing "representative" myths, I have probably been influenced most by the *Change* Panel on Academic Economics' *Colleges and Money: A Faculty Guide to Academic Economics* (*Change* Magazine, 1976); despite the presence of Howard Bowen and John Millett on that particular panel, the publication is rife with "emerging myths." It is evident that Bowen and Millett were out-voted.

Table 1. Budgeting Myths in Higher Education

1. Budgeting is the means by which institutions allocate or internally distribute their resources for efficient and effective use.

2. Budgeting is dependent upon clearly stated institutional missions, goals, and objectives. The better an institution can define and/or clarify its missions, the better it can prepare and use an annual operating budget.

3. Planning and budgeting are closely related and should not be regarded as separate or distinct from each other. Unless planning is a part of the budgeting process, the institution will be unable to realize its stated goals and objectives.

4. Indirectly or otherwise, the institution's budget determines its goals and objectives. Institutions cannot achieve or attain what they have not budgeted funds for.

5. The institutional budget is a plan for action, and, as such, it should be a rational ordering of the anticipated results of carefully specified plans, programs, and projects.

6. Budgeting is an analytical tool of institutional management and is an effective means of managerial control.

7. Budgeting requires the active, concerted attention of institutional leadership. Both administrative and faculty leaders must be involved.

8. The Budget is a prediction of future performance, and, as such, it provides early warnings of oncoming opportunities or threats to the institution or department.

9. Most successful administrators are skilled budgeters who understand institutional and departmental budgets and judge their success in terms of the budgets they negotiate.

10. Budgeting reflects the underlying social order, values, and expectations of an institution. When budgeting practices change, it is a sign that the underlying social order is changing.

Where one of these myths may be only partially true — or untrue — reasons can be given in support of its inapplicability to those areas or functions of higher education that ostensibly constitute its reason-for-being: teaching and learning. Indeed, one of the disposing factors to status-as-a-myth is the inference that whereas each of these "collective beliefs" would appear to be desirable from the standpoint of institutional purposes and operations, they do not apply (1) in most institutions of higher education, (2) at the level of the budgetary units for which budgeting is initiated and through which a substantial proportion of institution's funds must be expended, and/or (3) to the specific functions and activities that eventually determine institutional effectiveness and viability.

A Skeptical View of Budgeting

Each of the myths expressed in Table 1 is refutable — but that is not the purpose of this paper. To the contrary, the intention here is to "raise our level of critical consciousness" concerning our beliefs and assumptions about the budgeting process in higher education[1]. To do this, some general observations and inferences about budgeting should suffice. At other times — if they warrant such attention — the myths, as identified, can be dealt with separately.

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[1] The ERIC Clearinghouse on Higher Education has contributed greatly to the "raising of budgetary consciousness" through several interesting and informative monographs; these include: Ben Lawrence and Allan Service (Eds.), *Quantitative Approaches to Higher Education Management* (1977); Kent Caruthers and Melvin Orwig, *Budgeting in Higher Education* (1979); Jacob Stampen, *The Financing of Public Higher Education* (1980); Donald Walters, *Financial Analysis for Academic Units* (1981). The *Journal of Higher Education* has contributed its share through several excellent articles over the past several years, notable among which are Robert Cogan, "The Design of Budgeting Processes for State-funded Higher Education Organizations" (1980, *51*, 400-423); William Boyd, "Zero-Base Budgeting: The Texas Experience" (1982, *53*, 429-438) — and I am being derelict, of course, in not mentioning many other ERIC monographs and JHE articles.

The observations and inferences that follow are critical of a mystique that has long surrounded institutional and departmental budgets. They rest on a distinction that should be made between budgeting-in-process and budgeting-in-use. At the level of the budgetary unit there are many differences between a budget as a proposal or an expression of wishful thinking, an approved budget that is returned, and an amended budget that permits the budgetary unit to carry out its duties and functions[1]. It is, perhaps, only in the case of the externally funded project that budgeting-in-process occurs in the manner depicted by most textbooks, manuals, or flowcharts on budgeting. At that time, the budget-maker may be able to consider project goals and objectives, the resources required for their successful implementation, and the specific uses to be made of the budget unit's resources and capabilities. In the annual budgeting cycles of most institutions, budget heads are much more likely to engage in the adjustment and rearrangement of budget print-outs relayed by deans or divisional heads from "the budget office." Needless to say, these print-outs will be accompanied by detailed guidelines that leave little to the budget-making creativity of the budget head. If departmental needs, purposes, and resources uses have not been carefully considered and communicated prior to the arrival of a budget request, it will be a rare budget head who has either time or inclination to do so.

The anguish of "budget-making" at the level of a budgetary unit is merely one way of pointing out that few budgets are built from the ground up. Only in reconstruction do most institutional budgets become a pyramid of the separate budgets generated for functional divisions such as instruction, research, and public services; colleges, institutes, and centers; academic departments of instruction and other campus agencies or offices. Only budgeting-in-reconstruction has the rational, analytical, orderly features depicted in budgeting manuals. For most budget heads, the unit's budget is an authorization to spend. Faculty and staff will receive paychecks, phone bills and photocopying expenses will be paid, and supplies and equipment will be purchased.

Accommodating Features

The budgeting process in institutions of higher education is successful because it has many accommodating features. Within hours after the arrival of a new fiscal year, budgeting-in-amendment

[1] See Gerald Robins' remarkably clear description of the budgeting process in *Understanding the College Budget* (UGA: IHE, 1973).

begins. To carry out the functions and activities of the budget unit, funds must be shifted from the categories in which they arrived to the categories by which they must be expended. The same laws, governing board policies, and institutional regulations that dictate one will dictate the other. But the means by which programs, services, and activities are financed and funded are not the means by which they must be purchased. At this stage the budget head is permitted such creativity, persuasiveness, and bargaining power as he or she can muster — without flagrant violation of laws, rules, and regulations to the contrary.

It is for reasons such as these that (1) budgeting in higher education is not the rational, analytical process it should be; (2) budgets at neither the institutional nor the departmental levels reflect the internal distribution of resources for efficient and/or effective use; and (3) budgeting cannot accurately reflect institutional missions, goals, or objectives. To say that the process is dynamic is to say only the obvious. Budgeting is very much a function of institutional traditions and practices, the personalities and characters of those involved in the process, historical accidents that are unpredicted and unpredictable, and the availability of funds that can be used directly — or indirectly — to accomplish the myriad purposes of college faculties and administrators.

Most institutional budgets are in no way dependent upon the planning that has preceded the budget proposals or requests. Where budgeting and planning are specifically linked, it is most likely budgetary planning and not the planning of academic programs and services. Institutional and departmental budgets determine institutional and departmental goals only when there is neither leadership nor imagination. Budgets are merely a deterrent to the reassignment of personnel, the removal of programs and services, and the relocation of supplies, equipment, and materials: the lack of budgeted funds does not prevent many an unauthorized program — under different names in different departments.

But more incredibly, administrative leadership in higher education does not appear dependent upon budgeting skills and expertise. It is quite possible to purchase such expertise in the form of administrative and professional staffs, and the details of institutional budget preclude any genuine first-hand knowledge of which budgets are at which stage of amendment at any given time. In a litigious age presidents, deans, and department heads must act upon the legal advice of attorneys; more and more they must act upon the fiscal and

budgetary advice of people whom Lyman Glenny once identified as "the anonymous leaders of higher education" (*Journal of Higher Education*, 1972). The more specialized, technical, or centralized the budgeting process becomes, the less it serves directly and well institutional purposes or managerial control[5].

In closing this section, it should be pointed out that the views expressed here are neither widely held nor easily verified. They are, as indicated earlier, observations and inferences that have been made concerning budgeting practices[6]. Table 2 suggests that such observations and inferences will continue as state agencies revise or modify budgeting practices in an era of uncertain enrollments.

Budgeting Fictions and Their Uses

The budgeting process in higher education has created an appreciable number of budgeting fictions to facilitate the process. The most obvious fiction created is the full-time-equivalent student or faculty member (FTE) as a unit by which programs might be funded or educational services financed. Use of such fictions permits communication between financing agencies, such as state legislatures, and institutional leaders on budgetary matters. Such substance or validity as the FTE might have in budget negotiations obviously depends upon its usage. But like statistical indices that are computed for other purposes, FTEs are computed as a unit of budgetary analysis and do not exist in the "real world" of colleges and universities.

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[5] To see how specialized or technical budgeting can become, see David S. P. Hopkins and William F. Massey, *Planning Models for Colleges and Universities* (Stanford, 1981).

[6] See also "Why PPBS Wouldn't Work", *Research in Higher Education*, 9, 277-280.

Table 2. Criteria or Asumptions?

1. A funding system should facilitate accountability.

2. The workload variables used in the formula should be readily measurable.

3. The funding system should rely on formula components for recurring needs and on nonforn:ula components for nonrecurring and special needs.

4. The broad categories in the funding formula should generally reflect aggregate expenditure patterns of the University System.

5. Formula variables should respond to changing conditions.

6. The funding system should provide an easy means to communicate needs of the University System to funding authorities.

SOURCE: *FORMULA FOR EXCELLENCE: FINANCING GEORGIA'S UNIVERSITY SYSTEM IN THE '80s.* Final Report of the Study Committee on Public Higher Education Finance, Atlanta, September 1982.

NOTE: This report recommends a refinement of the current funding system by relating student fees more directly to program costs, by providing for differential funding of five program areas, by eliminating the disincentive of lapsing unexpended funds at the close of the year, and by making provisions for "quality improvement."

Assembled in Table 3 is a list of representative fictions that are themselves representative of the units, bases, or components for which money is ostensibly allocated and expended. Each of these fictions is a unit or feature that has gained meaning only through its usage in the administration of educational institutions. They are "givens" and, in the beginning, existed only as a figment of someone's imagination. Some have intuitive appeal, such as the full-time-equivalent student. Although it is widely recognized that students do not take the same courses in college and may vary as to the amount of coursework they enroll for, it is easy to accept notions of one student enrolling for ten hours and another one for five hours, the two of them constituting one FTE.

Table 3. Budgeting Fictions in Higher Education

Defined Units:	credit hour
	contact hour
	full-time-equivalent student (FTE)
	full-time-equivalent instructor (FTI)
	headcount nonacademic/support personnel
	continuing education unit (CEU)
	program element
	course load
Derived Factors:	student credit hour (SCH)
	student/faculty ratio
	student credit unit/FTE faculty ratio
	weighted teaching unit (WTU)
	allocation per FTE student
	cost per student credit hour
	direct and indirect cost factors
	fixed and variable costs
	faculty workload substructure
	induced course load matrix (ICLM)
	apparent staffing need (ASN)
	historical data base
	funding base
	measures of productivity

Some fictions have been in use so long that they may be accepted as "natural events" in academic life. The student-credit-hour is such a fiction, having been a part of the educational landscape for so many years that academicians have difficulty in imagining any other unit by which to express the credit students receive upon course completion. Student-credit-hours are units much preferred for budgeting purposes because they are more representative of student and faculty activities than such indices as degrees earned or conferred, a unit with considerable appeal as a measure of institutional output.

The extensive efforts to derive educational costs from such units have never been quite successful in establishing unit costs so as to make budgeting-by-cost fully acceptable to all parties engaged in the process. Many critics and observers of higher education are unconvinced that uniform cost standards have been established or that they can be established. The federal government has expended untold sums in funded efforts to establish uniform measures by which the activities and functions of higher education could be reported and on which federal funding policies could be based[7].

In summary, the fictions identified in Table 3 are neither universal nor exhaustive; they are merely representative. They are obviously the factors used in budgeting formulas that variously serve the purposes of funding agencies and institutional negotiators. Where they serve those purposes well, they have a pragmatic reality, and critics are well advised to "let sleeping dogs lie." They are regarded here as fictional, however, because they represent institutional functions and activities poorly. It is difficult — if not impossible — to translate such fictions or factors into the events or processes of instruction and learning, the undeniable purposes and functions of institutions of higher education.

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[7] See the National Commission on the Financing of Postsecondary Education's report *Financing Postsecondary Education in the United States* (U.S. Government Printing Office, 1973) and the accompanying staff paper *A Proposal: Interim National Standard Procedures for Deriving Per-Student Costs in Postsecondary Educational Institutions.* Some of us still have our copies of "the Henle Report", *Systems for Measuring and Reporting the Resources and Activities of Colleges and Universities* (National Science Foundation, 1967).

Aggregated at the level of a statewide system of public higher education, the factors in Table 3 are, in no poetic sense, "hammered out on experiential anvils." They provide a basis for communication between elected officials and appointed administrators; they provide a vehicle whereby public resources can be allocated for purposes of education. And those involved in the process do not question the reality or the meaningfulness of such manipulations as the division of lower division projected enrollments by an agreed upon student/faculty ratio to determine the number of faculty positions needed and then the multiplication of needed positions by average faculty salary to determine the dollars that should be allocated for resident instruction — **if** that is the method by which the participants have agreed the money will be transferred from state coffers to institutional bank accounts.

All such factors are fictional, however, because they are entirely definitional. They follow from a line of reasoning that begins, "Let it be that . . ." and ends with the transfer of funds. Having obtained their funds by such means, institutions may or may not resort to similar reasoning in their internal distribution. But exactly how student credit hours and faculty contact hours are translated into the institutional and program activities and functions of instruction and learning is another matter.

The Budget and Evaluation

The ambiguity of accountability as a predominant concern of the post-1960s poses many problems for the use of budgetary data in the evaluation of institutions and programs. The push for evaluation was initiated, accelerated, or sanctified by federal funding policies, and accountability was proffered as the Zeitgeist that made it all understandable. If the original motive was to make certain that federal funds purchased the goods and services they were allocated for, success is far more evident in the emergence of evaluation as a research specialty and the continuing divergence of budgeting-making as an administrative staff specialty. The canons of fiscal accountability were reestablished in one way; the development of evaluation skills and techniques proceeded in another*.

* Some of us have tried to keep up with the emerging specialty of evaluation research and we have tried to appreciate its particular virtues — not always with success. See "The Literature of Program Evaluation," *Research in Higher Education*, 1981, *14*, 277-280 as one effort.

The reasons for such results are many. The data and/or information for which there is an insatiable appetite in federal agencies and the corridors of statewide governing or coordinating bodies are not, it would strongly appear, the information and knowledge that are needed for determining institutional and program effectiveness. Evaluation, as an administrative responsibility, is dubiously aided by either the data reported to governmental agencies or the fictional factors that are employed in budget formulas. The specialization of budget-making and its relocation in the central offices of governing boards, state legislatures, and state executives suggests both "linguistic and cultural barriers" between those concerned with fiscal accountability and those concerned with institutional and program accountability.

Perhaps a more cogent reason is the fact that virtually all budgeting factors, data, or information pertain to input or process variables and retain a remarkable innocence of institutional or program outcomes. There has been great reluctance to tie budgeting procedures to expected outcomes such as degrees earned, amount of knowledge acquired, or personal satisfaction with one's college experiences. Student credit hours are spoken of as "generated," and they are often presented as if they were a more valid measure of institutional productivity than degrees conferred — for the obvious reason that many students do not complete college and the heaviest course loads are at the levels where most nondegree earners are enrolled — but student credit hours are an obvious derivative of enrollment and just as obviously an input.

Evaluation efforts, to the contrary, have placed an almost exclusive emphasis on results or outcomes. This is especially true since 1966 when the Coleman Report* shifted national attention and concern from educational inputs and processes to outcomes. As a result of the concern for results, institutions and programs have been severely criticized for not producing the results expected by sponsors, benefactors, and the paying public. A dominant motif of evaluation has thus been one of accounting for the variance of educational outcomes in terms of the inputs and processes that precede. A "competitive motif" would specify the effects of education in terms of policy variables, i.e., the input and process variables that can be better established as causal factors and which are subject to planned and directed change.

* The notorious equal opportunity study that should never be mentioned or cited without apologies to the reader.

When efforts have been made to bridge the gap between financial/budgetary inputs and educational effects, the results have been disappointing. The credit hours earned by students, their contact hours with the faculty, average faculty salary, and costs — direct or indirect — account for little of the variance observed in later careers, home and family life, or the acceptance of civic responsibilities. The gist must surely be that budgetary fictions tell us much about how institutional budgets are made, but they are not explanatory variables of value to evaluation specialists[10].

A Simple-Minded View

The schism between fiscal accountability — using institutional financial/budgetary data — and institutional or program accountability — using educational outcomes or effects — is a function of distinctions that should be made between efficiency and effectiveness. There are reasons to believe that efficiency is best defined as an output/input ratio; effectiveness boils down, sooner or later, to a matching of purpose and performance. Everyone can agree that public resources should be efficiently distributed and used by the nation's colleges and universities. How effective our 3,000 institutions are in fulfilling their stated, implied, or inferred goals and objectives, however, is another matter.

Institutional and program budgets should tell us more about the efficiency with which public resources are used. The purposes of institutions and programs should be more carefully evaluated prior to or at the time that institutional and program budgets are developed. Budgeting should be tied more directly to institutional and program purposes.

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[10] See Dave Spence, "Budgeting of Postsecondary Education in the Eighties" in *SREB's Financing Higher Education* series (1978). It is quite late for footnoting the series of studies conducted by Lyman Glenny and his colleagues at the Center for Research and Development in Higher Education at Berkeley, but mention should be made — at least — of Richard Meisinger, *State Budgeting for Higher Education: The Uses of Formulas* (1976) and Glenny's work with Ralph Purvis, *State Budgeting for Higher Education: Information Systems and Technical Analyses* (1976). There is still much to be learned from Jerry Miller, *State Budgeting for Higher Education: The Use of Formulas and Cost Analyses* (University of Michigan Institute of Public Administration, 1964).

The performance of institutions and programs, i.e., their effectiveness in achieving the purposes for which they were budgeted — must be evaluated at a later time. The institutional resources reflected in program budgets should be used with fiscal responsibility and efficiency — a budgetary truisim — but the efficiency with which those resources are used may tell us nothing about the effectiveness of the programs budgeted. Economy, if not efficiency, can be effected by early retirement of senior professors and the use of more instructors and teaching assistants on a lower pay scale -- but the effectiveness of academic programs could not be evaluated by such actions.

In terms that have become popular within evaluation circles, institutional and program budgets should have better "internal validity." This means simply that the budget should have a closer correspondence with the purposes and functions of its particular institution or program. In short, the budget should tell us more about what the institution or program is intended to accomplish.

But it is doubtful whether institutional and program budgets will ever attain a high degree of "external validity." They will always be of dubious value in depicting the quality or excellence of institutional and program outcomes; in permitting comparisons with and thus generalizations concerning other institutions and programs of a similar nature; and in permitting happy generalizations about the efficiency or effectiveness of higher education as a social, intellectual, and cultural enterprise.

Evaluation research in higher education may also have to settle for internal validity. Systematic evaluation efforts should be able to tell us if and when particular institutions and programs perform in a manner that is in keeping with the purposes for which they were ostensibly budgeted. The extent to which pluralism and diversity are evident in higher education, however, suggests that generalizations of broad and sweeping implication will remain the license of orators or after-dinner speakers. Modesty alone should inhibit books on the declining value of a college education.

There are other technical reasons why budgetary data and/or information poorly serve evaluation purposes. Undoubtedly relevant is the inappropriateness of budget categories as units of analysis. Both the aggregation of budgetary data and its reduction to some base give results that can be misleading. "Ecological fallacies" that result from correlation based on aggregate data are always possible and often unnoticed. Average faculty salaries, for example, delight the

heart of the AAUP, but they tell us little as an index of instructional cost. Cost per student credit hour is a tempting handle with which to grasp institutional differences, but unless CSCH is a cell in a carefully prepared matrix with many explanatory footnotes, it is no more than an innuendo.

Conclusions

National efforts to impose rational, analytical methods of budgeting on higher education have been one of the most interesting trends of the past two decades. There has always been a suspicion that funding and budgeting practices are, at bottom, irrational. Critics have frequently explained this irrationality as "politics" and having thus labeled the problem, they have assumed it was solved. But like Freudian psychology, the irrationality of budgetary behavior may be determined in a highly rationalistic manner. The meaning and significance of the budget must be sought, therefore, at different levels of "budgetary consciousness." What takes place at one level may be innocent of what is going on elsewhere — but each makes sense in its own way.

The literature of budgeting has grown phenomenally in the last ten or twelve years — and as unlikely as it would seem, much of the literature has been interesting. Unfortunately, the published literature gives rise to an appreciable number of budgetary myths that assuage administrative egos but do not distract those who are busily making budgets. In a similar manner budgetary practices have given body to budgetary fictions that have little to do with the purposes for which funds are sought and which have little effect on the way the funds are expended. It is altogether possible, however, that they do serve well the elaborate — and increasingly elaborated — process of negotiating annual budgets.

Myths and fictions that serve well the budgetary process, however, may not serve current demands and expectations for institutional and program evaluation. Accountability is the gospel that would make us all believers, but fiscal or budgetary accountability is one faith and institutional or managerial accountability is another. Budget cycles have a momentum all their own, and even the most poorly managed or ill-led institutions will have a budget at the beginning of their fiscal year. They will run the course of their respective budgets and still lack institutional effectiveness or viability. In all probability, such institutions will neither be redeemed nor renovated through better budgeting policies and practices — BUT no one should discourage them from trying.

James Oliver Robertson, a historian, has looked at the disparities between myth and reality in American life with the encouraging conclusion that myths are "the mechanism by which people believe contradictory things simultaneously; they are also the mechanism by which those contradictions are . . . resolved — or at least held in a tension which is not uncomfortable to the believers" (*American Myth*, 1980, p. 346). Those who are engaged in the process of institutional and program budgeting apparently do not feel uncomfortable with the tensions created by budgeting myths and fictions. Let us hope this is because participants do not confuse budgetary myths and fictions with educational realities.

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CHAPTER 30

A Planning, Budgeting, and Evaluation System: Lessons From Experience

Leif S. Hartmark

The planning process at SUNY Albany reflects the following assumptions and beliefs. Essentially, planning involves 1) an orientation to the future, 2) a commitment to rationality in decision-making, 3) clarity regarding strategic purposes and their methods of implementation, and 4) an adaptive capacity to respond to future conditions which may or may not have been anticipated. While planning is intrinsically futuristic in orientation, its primary purpose is to inform

Dr. Leif S. Hartmark is Director of Planning, State University of New York at Albany.

today's decisions. To this end we employ a one-year rolling plan within a multi-year perspective. In effect, this "strategic planning" (Cope, 1978) involves setting short-term priorities and action steps within the context of longer-term directions and goals.

A second characteristic of Albany's process is the extent to which it integrates planning with budgeting and evaluation. Rather than an end in itself, planning is viewed as an integral part of the decision-making process on each of several levels within the university.

Third, the Albany process is a product of a specific institutional setting and historical development. Critical here is that the University's planning function was opportunistic: little attention had to be given to the question of institutional mission because existing programs were assured of continuing resources, and proposals for new or expanded programs had only to contend against one another for shares of an ever-increasing budget (SUNY-Albany, 1980b, p. 6).

By the early 1970s it had become clear that the University could not continue to support a broad range of programmatic development. The State's fiscal crisis of 1975 led to major budget cuts. In response to this crisis, the University conducted two successive reviews of the quality and need of all academic and support programs. Based on the recommendations of the presidentially appointed Select Committee (1975) and Task Force (1976), the campus eliminated twenty-two academic programs, three academic support units, and reorganized or cut numerous administrative and student services units. The resources thus gained were in part used to meet the state's budget reductions, but more importantly they were reallocated to departments and schools which were given a high priority on the basis of their quality, their enrollment demand, or their ability to contribute significantly to the analysis of major public policy issues.

The current system of planning, budgeting, and evaluation grew directly out of this experience. First, there was a clear need to consolidate the gains made by the Select Committee and Task Force and to restore a sense of confidence in the University. In 1977, the Campus published a Mission Statement which formalized the criteria for future program development and resource allocation. Second, since the program reductions of 1976 were implemented on a phased basis, a pool of resources was created for reallocation in each of several ensuing years. A need was recognized early for some formal mechanism to inform and legitimize these reallocations. This led in large part to the initiation during the 1977-78 academic year of our current annual cycle of planning and budgeting.

A Planning-Budgeting-Evaluation System

The planning system employed at Albany closely resembles the formal-rational decision paradigm. The basic paradigm assumes a rational, comprehensive sequence of planning elements and includes formulation of institutional mission based on situational appraisal, development of goals and objectives, establishment of broad program and resource strategies, selection and design of action programs, implementation, and review. The intent is a completed cycle of activities that then acts to become self-assessing and self-correcting (Peterson, 1980, p. 127). This rational model, first articulated in the 1950s, has served as the conceptual underpinnings for numerous management systems including performance budgeting, PPBS, program evaluation, management by objectives, and strategic planning. The model portrayed on Figure 1 has four basic elements: planning parameters and the three functions of planning, budgeting, and evaluation.

One of the unique approaches at SUNY Albany has been "environmental scanning." Environmental scanning is difficult to do well, and it is subject to a number of pitfalls. The more conventional approaches exhibit several weaknesses. Projections derived from relatively simple extrapolations of recent trends can result in short-run cyclical variations being mistaken for secular trends. Moreover, these projections are often based on assumptions of a future society different only marginally from our contemporary environment. For scanning to be useful, it requires qualitative as well as quantitative information.

In the 1980 edition of the SUNY-Albany plan we attempted to outline several long-term economic, political, social, and technological factors which may be expected to affect the university over the next decade. More recently, we published a set of five-year planning assumptions regarding future prospects for resources, demand for university services, the size and scope of the university, and future human resources needs (SUNY-Albany, 1980a, 1982). This environmental scanning and the identification of future scenarios has had the benefit of making our planning assumptions more developed and explicit and therefore amendable to testing and revision in the face of experience.

The planning system at Albany has evolved into a highly articulated structure of means-end statements at all organizational levels of the University. These means-end statements serve a number

of functions including a functional description of each organizational unit, a means for identifying inter-organizational relationships, a method for setting fairly concrete goals and objectives, and a means for evaluating progress toward their achievement.

The planning structure is articulated in three respects. It is based on a logical hierarchy of "means-end" statements ranging from the broad and relatively abstract purposes of the Mission Statement to more immediate and concrete action steps. A second dimension is timing. As one moves down the means-end chain from mission statements to action steps, the planning statements move from the level of eternal verities to short-range (one-year) implementation steps. In this respect, the Albany system incorporates all three levels of strategic, tactical, and operational planning.

The goals and priorities from the 1982 edition of *Programs and Priorities* are illustrative. One *goal* concerning liberal education subsumes a number of elements with a relatively open-ended time frame: "Continue to implement and refine curricula in liberal education and initiate programs to improve the articulation between liberal learning and career preparation." This is followed by five more specific *priorities* dealing with the implementation of curricular distribution requirements: devising campus policies to respond to shifts in student demand, identifying courses and programs as attractive alternatives to career-oriented programs, better relating academic and career advisement, and developing new student internships. Several of these priority statements include assignment of responsibility to administrative officers and/or governance bodies, with target dates for completion of specific elements of the program.

Finally, the planning structure is articulated by organizational level; planning statements are prepared at the departmental, college or school, and campus-wide levels. Campus-wide goals and priorities are based on a synthesis of departmental and college priorities, and these, in turn, set a context for subsequent departmental and college planning (see Figure 2). This latter element is perhaps the most important. Considerable effort has been made to articulate the planning structure with the organizational structure of the University and in so doing encourage the utilization of planning as a regular, ongoing administrative function.

The engine which drives the planning system is the annual updating process. All planning units from the department to the campus-wide level participate in an annual review and revision of

their respective planning statements. As would be expected, the general purposes in the Mission Statement and the goals contained in College and School plans tend to be relatively stable over time and need not be updated or revised annually. The annual review and updating focuses on the college and departmental priorities and action steps. The basic format of the annual update includes the following five elements.

1) **Recent Trends Affecting Departmental Planning.** This is analogous to the planning parameters described earlier. At the department or college levels this includes such things as a description of trends in the discipline or professional stream, enrollment trends, information on the demand for program graduates, recent changes in departmental organization or program direction, etc.

2) **Progress Report.** Each department, college, or school reports on the degree to which progress was made on each of the priorities and action steps of their plan.

3) **Revised Priorities and Action Steps,** as needed and appropriate. In principle the revised priorities are a product of mutual agreement between the planning unit and the next succeeding organizational level (department-dean; dean-vice president; vice president-president). On issues of strategic or campus-wide importance (e.g., the initiation of a new doctoral program) final sanction of a priority will rise to the presidential level.

4) **A Five-Year Perspective.** This may include a preliminary indication of any potential major changes in departmental mission or program focus, new program initiatives anticipated within the next five years, or an early warning regarding any major "big ticket" budgetary needs. In practice much of this information is already contained in the first three sections of the update. In other cases this five-year scanning exercise has been helpful in moving the departmental plans beyond a pedestrian focus on near term, operational objectives.

5) **Departmental and College/School Resource Requirements.** The budget documentation is tied directly to the planning update. It includes detailed historical data on unit expenditures and invites budget requests for the immediate fiscal year and the second year of a five-year planning horizon.

Linking Planning and Budgeting

At Albany we have attempted to articulate planning and budgeting in the following respects. Planning sets the policy framework for campus-budgeting. The annual edition of the campus plan, *Programs and Priorities*, contains a description of the anticipated budget climate, and this is reinforced by briefings with deans, directors, and chairs at the beginning of the annual campus budget cycle. Second, the departmental resource requests for a two-year period are tied to the annual planning update. Third, there is a concurrent review of plans and budgets allowing planning decisions to be made with some knowledge of their budgetary ramifications and for "rough cut" preliminary resource decisions to be made prior to the detailed decision-making of the annual allocations process. Finally, planning and budgeting are integrated via the joint products of the process. The annual Budget Request to SUNY and State government is a combination planning statement and budget request. Similarly, the agenda of goals published in *Programs and Priorities* reflects a recognition of the resource constraints facing the campus.

Evaluation

In the early 1970s Albany initiated a formal process for periodic reviews of all academic programs, and the results of these formative reviews provided a wealth of information useful for the more difficult summative evaluations which were an integral part of the program eliminations during the mid 1970s. More recently we conducted special evaluation studies, began collecting information on the efficiency and effectiveness of academic support and administrative programs, devised a standard instrument for student evaluations of instruction, and initiated several studies of student educational outcomes. Based on this experience to date we believe that evaluation can take many forms, that it requires a creative balance of information and judgment, and that ultimately, if evaluation information is to be useful, it needs to be linked to the decision processes within a university. We also concluded that one of the most accessible and suitable mechanisms for bringing evaluation information to bear on decision-making is the planning process (SUNY-Albany, 1980b, p. 50).

Some types of evaluation activity are best left outside the formal planning process; personnel evaluations and student evaluations of individual instructors are illustrative. Even studies of educational outcomes may have more direct utility in curricular development than

in broader academic program planning. Other forms of evaluation (e.g., program review, collection of information relating to the quality or productivity of a set of activities, goals assessment, etc.) may be directly utilized in planning. The advantages of setting evaluation within a planning process comparable to the one at Albany are several:

- It capitalizes on an annual, synoptic review across all major university activities.
- It is a goal-driven activity.
- It is merged with resource allocation, thereby linking budgeting with evaluation.
- Evaluation (both on-going monitoring as well as selective in-depth reviews) provides feedback for planning and resource allocation.
- It more clearly integrates evaluation with existing decision-making structures and processes.

While there are benefits to basing resource allocations on evaluative information, the progression from evaluation findings to budgetary implications is seldom direct or obvious. Evaluations need to be defined concretely enough (i.e., actionable) that the resource implications can be identified. For example, what are the possible responses to a global finding that students majoring in program x feel they have attained their educational goals to a greater extent than students in program y? Often, this question can only be answered by further questions. When the primary concern is economic, the answer to the question is ambiguous.

The Planning-Budgeting Process

Thus far we have focused on the logical structure of planning, budgeting, and evaluation and the relationships among them. The process which has evolved at Albany is described here, not as a recipe for other institutions, but rather as an illustration of how the three discrete functions of planning, budgeting, and evaluation have been brought together in a coordinated, mutually re-enforcing way. The main elements of this process were in place by 1980, but it has undergone several significant modifications since that time.

The 1980-81 cycle began in the Fall with the publication of *Programs and Priorities* which set a context for departmental planning

and budgeting. Departments then prepared their respective planning updates and associated resource requests in a consolidated document. These planning updates and budget requests were reviewed and assessed in turn by the appropriate dean (or administrative officer in the case of non-academic units) and by the respective vice presidents.

The planning updates were also reviewed by the Long Range Planning Committee of the University Senate, which assessed each plan on the basis of consistency with the University's mission, any major policy implications, and by commenting on any major incongruities between departmental and university-wide goals and priorities. The President then met with each dean or administrative officer to review the college and departmental plans, reach understandings on major policy issues or proposed initiatives, and in some cases negotiate preliminary resource commitments.

Immediately following the plan review, a presidential budget panel consisting of faculty, students, and staff reviewed the departmental budget requests in light of the departmental plans, university priorities, and the current deployment of resources. The panel worked in consultation with the vice presidents, and it was supported by planning and budgeting staff.

Concurrently during the Spring, planning teams chaired by each vice president and consisting of deans, administrators, and members of the Long Range Planning Committee review and assess progress on the campus-wide goals and recommend revised priorities for the ensuing one- or two-year period. Once accepted by the President, these recommendations are reviewed by the Dean's Council and the University Council (a campus citizen advisory board). The final product is then published in the new edition of *Programs and Priorities*.

During the past two years we have continued to adapt this process to make it more flexible and responsive to campus needs. The roles of advisory committees have changed. The Long Range Planning Committee is no longer expected to review all departmental updates. Rather, the committee is focusing more attention on participating with the planning staff and others in the conduct and review of longer term planning studies. The budget panels have focused their attention on recommendations for budget planning (year two of the planning cycle) rather than reviewing specific departmental requests for additional allocations in the most immediate fiscal year. Finally, the Resource Allocation Committee of the University Senate has

more clearly recognized its advisory role as reflected in its new title of Resource Advisory Committee.

The most far-reaching modification may turn out to be some changes in the process which we began this Fall. For academic units we have more clearly separated the timing of the planning and budgeting phases of the process, initiated the planning cycle earlier in the year, and devolved more of the budgeting responsibility from the President to the Vice Presidents.

The effect of these modifications is to create two parallel processes for planning and budgeting, respectively, as portrayed on Figure 3. The annual cycle is initiated with planning meetings by the President with each dean, and these meetings tend to focus more on policy and planning rather than discrete budgetary issues.

The Benefits of Planning

There appear to be a number of benefits associated with the planning process as it is currently conducted at Albany, and several of these findings are consistent with the experience of other universities reported in the literature.

Rational. The planning system which has evolved has a surprising degree of consistency with formal-rational models of planning and decision-making. In practice the process is far more noisy than any abstract model would suggest. Nonetheless, the end product does resemble a textbook conception of strategic planning: rolling annual planning process with a longer range perspective, incorporating program and budget planning, and informed by evaluative feedback into the system.

Comprehensive. The Albany process has been able to serve a number of discrete functions within the structure of an integrated system. The needs of master planning are served by the mission statement and the annual updating of institutional goals and priorities. Departmental and college planning is articulated with campus-wide planning. The annual update also serves a retrospective function of an annual report. The planning process provides a context and framework for budgeting, and it serves as a form of ongoing evaluation of institutional activity. Finally, the planning reviews spawn special studies dealing with programs, resources, and evaluations of program effectiveness.

Long-Range Planning vs Short-term Flexibility

The Albany planning process attempts to use multiple planning horizons ranging from long-range, mission-oriented goals to one-year action plans. Second, the process of annually updating planning goals (regardless of their duration) is essential to keeping the planning function current with external trends and institutional developments. Whatever the structure and process, perhaps the most important requisite is to maintain flexibility in planning and to maintain the institution's willingness to take advantage of unforeseen opportunities. Planning requires a mix of rationality and opportunism.

Participation. The Albany's process is highly participatory and consultative. During the past four years more than 150 members of the University community have served on budget panels. This has broadened campus involvement in planning and resource allocation, sensitized a large number of faculty to the budgetary realities facing the campus, and provided a mechanism for effective participation in strategic issues by faculty governance. This has also provided an offset to the liabilities of formal-rational systems which tend to isolate planners from the real world and work at cross purposes with more political governance processes of a university.

Consensus. Perhaps as a result of the high level of participation, the increased flow of information, and the longevity of the planning process, there is a reasonable degree of clarity on campus directions and priorities and a remarkable extent of consensus on those goals. One indication is the extent to which annual reviews by budget panels continually confirm the recommendations of earlier panels.

Longevity. The fact that the planning system has remained in operation without major revision or replacement since 1977 is in itself somewhat remarkable. The process has become firmly institutionalized and is now a fairly natural extension of the university's decision-making process and leadership style.

Legitimacy. This extent of prior consultation enhances the legitimacy of administrative decisions. If faced with a crisis, the administration could respond without extended deliberation or consultation. Consequently, the campus is able to maintain a high level of "combat readiness" in the event of precipitous budget cuts.

Improved Information for Decision-making. This is essentially a subjective assessment. Whether or not the quality of

decisions has improved, it can be demonstrated that the decisions are better informed. First, the volume, quality, and timeliness of data are enhanced. The discipline of a planning process does for institutional researchers what the demands of the budget deadlines do for budget analysts; it forces them to get the right information to the right place at the right time. A related benefit of the planning process is the increased flow of information and communication throughout the university.

Documentation. Programmatic and budgetary decisions are made with the benefit of extensive documentation in the form of planning updates, budget justifications, review documents, and minutes of planning and budgeting meetings, etc. Further, the wealth of planning material and the demands for analysis have situated the campus well for responding to statewide planning and budgeting requirements.

Improved Budgeting. Departmental budget requests are "plan-driven" and generally clearly articulated. Resource allocation has more clearly reflected program priorities. For example, the Mission Statement published in 1977 listed programs which had a priority claim for additional resources on the basis of three criteria. Ten academic units were identified on the basis of enrollment demand. Within three years, all but two of these departments had gained additional faculty or hired new faculty on upgraded positions.

Weaknesses

As in any major system, there are necessary tradeoffs between the benefits obtained and their costs and related difficulties.

Complexity. This may be a necessary byproduct of any comprehensive process which attempts to incorporate a number of functions. At any given time several activities may be occurring, each with a different time perspective (one-year, two-year, five-year) and a different objective (planning, budget preparation, budget execution, program review, etc). It is difficult to specify a starting point or conclusion to what has evolved into an ongoing set of processes. At a minimum this creates some confusion among inexperienced participants.

Cost. The direct costs of the planning process in terms of staff time and other resources are relatively modest. There are numerous hidden costs in the form of time and energy by the President and other

executive officers, deans, and department chairs. Further, faculty and university staff have been quite generous with their time in participating in budget panels, planning teams, and governance committees. Some of the cost is offset by the extent to which the planning process has become an integral part of campus administration and governance.

Frustration. Influence on institutional decisions, particularly by advisory groups, is subtle and indirect. Planning participants who are not fully cognizant of these subtleties can become frustrated if their efforts do not bear immediate fruit. Similarly, planning engenders a revolution of rising expectations.

It is becoming increasingly difficult, given resource constraints, to reward good planning with resources. This problem is partly a function of organizational position. A program initiator cannot be expected to have first-hand knowledge of the campus-wide resource constraints. However, most institutions cannot support very many entrepreneurs at a level which they would view as adequate. More important, this frustration is endemic to what one observer has called the "additive bias" of planning (Ewell, 1982). Planning is basically expansionistic or growth oriented. The request to plan is often interpreted as a requirement to add new activities rather than redirecting current activities. This problem of rising expectations is accentuated when planning is integrated directly with budgeting.

Integrating Planning and Budgeting

During the past two years we have begun to more clearly differentiate the planning and budgeting process. Planning and budgeting are becoming two articulated processes, rather than a single unitary process. This year we will be reviewing budgets in the Fall, followed by a progress report and plan update cycle in the Spring. The budgetary process will be informed by the campus-wide goals and by a series of informal presidential planning meetings with each dean immediately prior to their preparation of budget requests. However, this budget review will not be driven by the departmental plans in any mechanistic sense. Our experience to date supports the belief that the important linkages are made through the timing of parallel processes rather than through formal planning documents or elaborate planning structures (LeLong and Minman, 1982).

Lessons from Experience

Initiating a new planning system is a special case of a much larger

problem of managing change in complex organizations. There are a number of considerations which will influence the degree to which such change is accepted and the speed with which any assimilation of new practices occurs.

Timing. Perhaps the most obvious variable is that of timing. In the case of Albany, a scope review, mission statement, and annual planning process were all introduced within a period of three years. It is unlikely that the campus would have moved that rapidly without an externally imposed crisis. Moreover, the form and direction that the planning process took was influenced by the campus' prior experience with academic program reviews and with a reliance on master-planning during the preceding decade.

Experimental Incrementalism. In retrospect, the Albany planning system appears more rational and logical than its chronological development would suggest. In reality, the current system was developed incrementally, with a fair degree of experimentation and patching. Throughout this period, we have attempted to experiment with new approaches and encourage feedback on the utility of the process. In many cases we found it preferable to compromise the formal model in the interest of increasing the flexibility of the system. It would have been impossible to predict five years ago how this system would eventually look today.

Complement the Existing Decision-Making System. The Albany process was shaped by the traditions, structures, and management style in which it was developed. Its centralization was a function of the age, size, and traditions of the institution. Its presidential orientation reflects the way in which major policy decisions were made. The open, participatory form is a function of the President's administrative style. In addition, each element of the process was grafted onto an organizational function which was well developed. The University's established program review process provided a base for the program reductions in 1975 and 1976. The planning focus of the Select Committee and Task Force gave impetus to the Mission Statement and ongoing planning process. The prior experience with budget cuts and a well developed budgetary system contributed to the early integration of budgeting with planning.

Sensitivity to Data. Any data can have far-reaching repercussions for an academic department, particularly if it is under-conceptualized or poorly understood. Moreover, even when policy-makers are sensitive to the limitations of the data, program directors

do not always believe that to be the case. We have attempted to provide multiple indicators where feasible to guard against the impression that major decisions are made on the basis of a single number.

Communication. Planning at Albany relies on extensive participation and consultation. Even if the planning were of little value, the contribution of the process to lateral and horizontal communication is sufficient to justify the effort. Similarly, in managing the planning process, it is essential to maintain open lines of communication with a myriad of planning participants.

Leadership. This brings us to the final point. Effective planning requires active support at the highest levels of the institution. It cannot be sustained by planning staff or middle managers alone. An extensive change process such as planning requires a sponsor of sufficient authority and stature to promote the purposes and benefits of planning to the faculty and constituencies of the University. Whatever successes we may have experienced at Albany is attributable to the enthusiastic and tireless efforts of a President who has also been a constant source of inspiration to his staff.

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FIGURE 1 — THE UNIVERSITY AT ALBANY PLANNING-BUDGETING-EVALUATION MODEL

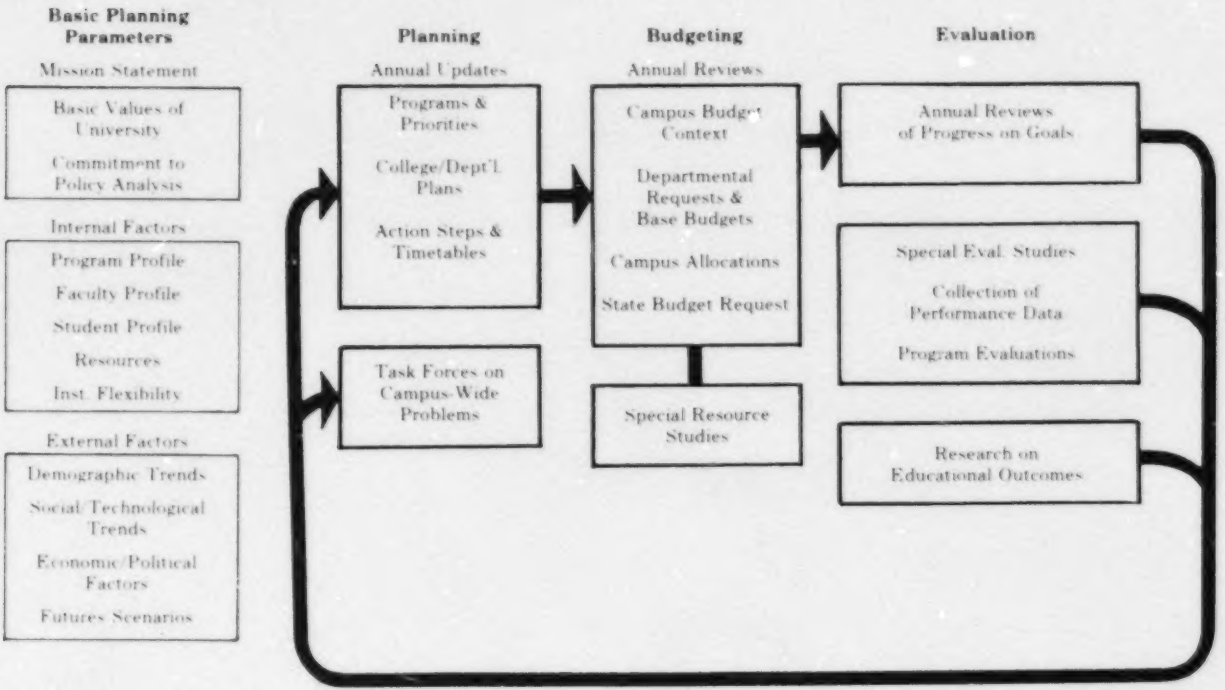


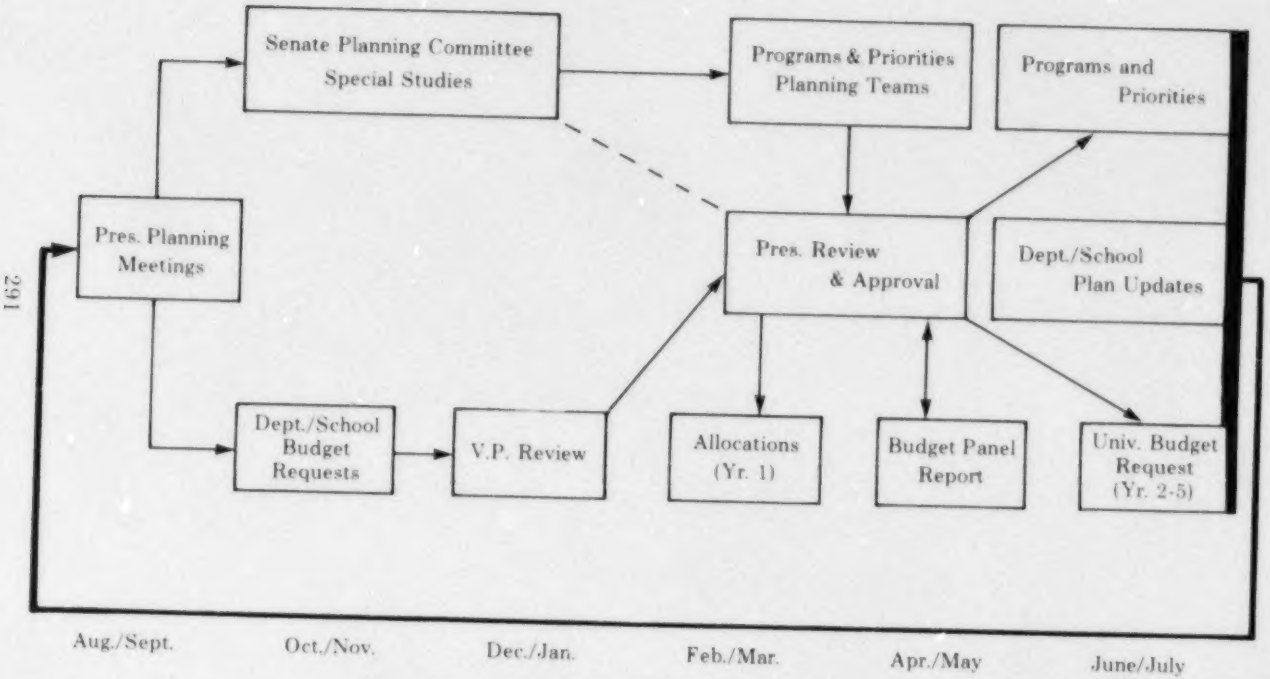
FIGURE 2

THE ARCHITECTURE OF PLANNING:
Relationships Among The Levels Of Planning Within SUNY-Albany

Organizational Level	Planning Statement	Means/ End/Chain	Scope
University-wide	Mission Statement	General Purposes	Long term
	Programs & Priorities	Goals	5 Years
		Priorities for Action	1-2 Years
College/School Division	Five-Year Plans	Goals	Long term
		Priorities for Action*	5 Years
		Action Steps	1-2 Years
Department/Unit	Five-Year Plans	Goals (in college/school plans)	
		Priorities for Action*	5 Years
		Action Steps	1-2 Years

*Articulated with University-wide goals and priorities

FIGURE 3 — PLANNING and BUDGETING PROCESS SUNY — Albany



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